

RESOLUTION NO. 00-063

**RESOLUTION OF THE CITY COUNCIL OF SARATOGA
ADOPTING A NEGATIVE DECLARATION AND
CIRCULATION AND SCENIC HIGHWAY ELEMENT UPDATE**

- I. WHEREAS, the City of Saratoga initiated consideration of a General Plan Amendment to adopt the Circulation and Scenic Highway Element Update (referred to hereinafter as the "Project") in 1999.
- II. WHEREAS, an Initial Study and proposed Negative Declaration ("IS/ND") was prepared for the Project by the City of Saratoga, pursuant to the requirements of the California Environmental Quality Act (CEQA, Public Resources Code sections 21000-21177), CEQA Guidelines, and City CEQA requirements.
- III. WHEREAS, the IS/ND was circulated for public review period beginning on May 17, 2000 and ending on September 20, 2000.
- IV. WHEREAS, the IS/ND indicates that no significant adverse environmental impacts will result from the Project.
- V. WHEREAS, on July 26, 2000 the Planning Commission at a duly noticed public meeting considered the adequacy of the IS/ND including all oral and written comments and the staff recommendation for approval of the IS/ND. The Planning Commission reviewed and considered the information in the IS/ND, administrative record, and Staff Reports for completeness and compliance with CEQA, the CEQA Guidelines, and City CEQA requirements. The Planning Commission unanimously recommended to the City Council adoption of the IS/ND for the Project.
- VI. WHEREAS, the proposed Circulation and Scenic Highway Element Update was considered by the City of Saratoga Public Safety Commission at duly noticed

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public meetings held April 13, 2000 and May 11, 2000. On May 11, 2000 the Public Safety Commission recommended approval of the Circulation and Scenic Highway Element Update to the City Council.

- VII. WHEREAS, the proposed Circulation and Scenic Highway Element Update was considered by the City of Saratoga Planning Commission at a duly noticed public hearing held May 24, 2000 and at duly noticed public meetings held May 16, 2000, June 14, 2000 and July 26, 2000. On July 26, 2000 the Planning Commission unanimously recommended approval of the Circulation and Scenic Highway Element Update to the City Council.
- VIII. WHEREAS, on September 20, 2000 the City Council held a duly noticed public meeting and on October 4, 2000 the City Council conducted a duly noticed public hearing and on November 15, 2000 the City Council conducted a duly noticed public hearing on the adequacy of the IS/ND and on the Circulation and Scenic Highway Element Update at which oral and written comments as well as Public Safety Commission, Planning Commission and staff recommendations were presented to the City Council. The City Council reviewed and considered the information in the IS/ND, administrative record, and Staff Reports for completeness and compliance with CEQA, the CEQA Guidelines, and City CEQA requirements.
- IX. THEREFORE, BE IT RESOLVED that the City Council hereby makes the following findings:
1. Notice of all Planning Commission and City Council hearings on the IS/ND and the Circulation and Scenic Highway Element Update ("Project") was given as required by law and the actions were conducted pursuant to CEQA, the CEQA Guidelines, and local City requirements; and
 2. All Interested Parties desiring to comment on the IS/ND and Project were given the opportunity to submit oral and written comments prior to this action by the City Council; and
 3. All comments raised during the public comment period and at the public hearings on the IS/ND and Project were responded to adequately; and

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4. No new or substantial changes to the Project and/or to the IS/ND are proposed as a result of the public comment process; and
 5. The City Council was presented with and has reviewed all of the information in the administrative record; and
 6. The IS/ND has been completed in compliance with the intent and requirements of CEQA, CEQA Guidelines, and the City's CEQA requirements, and the IS/ND represents the City Council's independent judgment. The City Council has considered the information contained in the IS/ND and the record in considering the Project and related actions; and
 7. Based on the entire record of this matter, there is no evidence that the Project will have a significant effect on the environment; and
 8. The documents constituting the record of proceedings upon which this City Council's decision is based are located in the City of Saratoga Department of Community Development and are maintained by the Director of that Department.
 9. The City Council has made no major modifications to the General Plan Amendment recommended by the Planning Commission.
- X. BE IT FURTHER RESOLVED that the City Council hereby adopts the Negative Declaration attached hereto as Exhibit A.
- XI. BE IT FURTHER RESOLVED that the City Council hereby adopts the Circulation and Scenic Highway Element attached hereto as Exhibit B to replace in its entirety the Circulation and Scenic Highway Element appearing at pages 3-6 through 3-23 of the City of Saratoga General Plan. The goals, policies, and implementation measures set forth in section VI of the Circulation and Scenic Highway Element attached hereto are hereby adopted as goals, policies, and implementation measures of the City of Saratoga General Plan.

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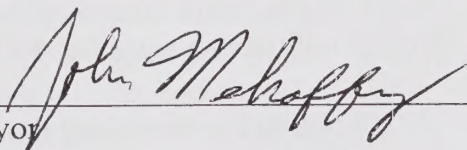
PASSED AND ADOPTED by the City Council of the City of Saratoga, State of California, this 12th day of December 2000, by the following vote:

AYES: Evan Baker, Stan Bogosian, Nick Streit, Ann Waltonsmith,
Mayor John Mehaffey

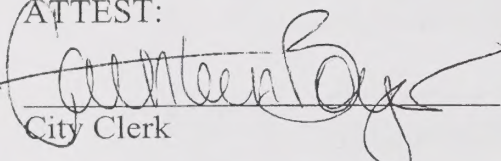
NOES: None

ABSENT: None

ABSTAIN: None



Mayor

ATTEST:


City Clerk

Attachments

Attachment A: Negative Declaration

Attachment B: Circulation and Scenic Highway Element Update

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City of Saratoga
NEGATIVE DECLARATION

**Declaration That Environmental
Impact Report Not Required**

The undersigned, Director of Community Development and Environmental Control of the CITY OF SARATOGA, a Municipal Corporation, after study and evaluation, has determined and does hereby determine pursuant to the applicable provisions of the Environmental Quality Act of 1970, Section 15063 through 15065 and Section 15070 of the California Administrative Code, and Resolution 653 of the City of Saratoga, and based on the City's independent judgment, that the following described project will have no significant effect (no substantial adverse impact) on the environment within the terms and meaning of said Act.

Project Description:

Community Development Department staff is updating the *Circulation and Scenic Highway Element* of the City's General Plan. The document will act as the City's long-range traffic management plan. It was last updated in 1983. The update is intended to assess existing traffic conditions and to develop a goals and policies document to address changed conditions

Project Location:

Citywide

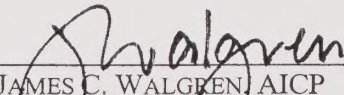
Name and Address of Proponent:

City of Saratoga
Community Development Department
13777 Fruitvale Avenue
Saratoga, CA 95070

Reason for Negative Declaration

The proposed project could not have a significant effect on the environment. The *Circulation and Scenic Highway Element* update provides for Goals, Policies and Implementation Measures to reduce traffic impacts already felt by the community. The document does not contain any Goals, Policies or Implementation Measures that are growth inducing or traffic inducing and will not cause significant environmental impacts pursuant to the terms of the Environmental Quality Act.

Executed at Saratoga, California this 12th day of December, 2000.



JAMES C. WALGREN, AICP
COMMUNITY DEVELOPMENT DIRECTOR

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CIRCULATION AND SCENIC HIGHWAY ELEMENT UPDATE
CITY OF SARATOGA, CALIFORNIA

**BACKGROUND REPORT AND
DRAFT GOALS, POLICIES, AND IMPLEMENTATION MEASURES**

**PREPARED FOR:
CITY OF SARATOGA**

SEPTEMBER 13, 2000

**CIRCULATION AND SCENIC HIGHWAY ELEMENT UPDATE
CITY OF SARATOGA, CALIFORNIA**

**BACKGROUND REPORT AND
GOALS, POLICIES, AND IMPLEMENTATION MEASURES**

**PREPARED FOR:
CITY OF SARATOGA**

**PREPARED BY:
FEHR & PEERS ASSOCIATES, INC.**

SEPTEMBER 13, 2000

VISION STATEMENT

It is the intent of the City that the emphasis on maintaining the rural character of Saratoga as expressed in the General Plan and Specific Plans be affirmed, preserved and furthered by the goals, policies and implementation measures presented in the Year 2000 Circulation and Scenic Highway Element Update. Additionally, it is the intent of the City that the mandate expressed by the citizens of Saratoga to control density, traffic, and noise be affirmed, preserved and furthered by the goals, policies and implementation measures presented in this document. The City also pledges to be a responsible partner in developing regional transportation solutions. Where any inconsistency or conflict appears in interpreting this document, the strong value that Saratogans place on the rural character of the City shall weigh heavily in the resolution of such conflict.

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TECHNICAL APPENDIX:

- Level of Service Tables for Signalized and Unsignalized Intersections
- 1983 Circulation and Scenic Highway Element
- Public Workshop Summaries (September and November 1999)
- New Daily and Intersection Traffic Counts
- Existing LOS Calculation Worksheets
- Future (2025) LOS Calculation Worksheets
- Sample Neighborhood Traffic Management Guidelines
- Sample Guidelines for Safe Walking and Bicycling
- Sample Suggested Route to School Map

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I. INTRODUCTION

What is a Circulation and Scenic Highway Element?

A Circulation and Scenic Highway Element is one of seven required elements of a City or County's General Plan. California Government Code Section 65302 (b) specifies that the Circulation Element of a General Plan shall identify the proposed location and extent of major thoroughfares, terminals, and services designed to transport people and goods. The City of Saratoga's transportation system is comprised of roadways, bikeways, sidewalks and trails, transit facilities and services, and rail lines.

The Circulation and Scenic Highway Element addresses all travel modes and includes the goals, policies, and implementation programs that guide the development and maintenance of the transportation system. Scenic highway designations and corridor preservation issues are also addressed as part of this element.

Why Update the Circulation Element?

The Circulation Element was last updated in 1983 and included a limited amount of data regarding future travel demand. Over the last sixteen years, the City of Saratoga has seen significant changes in its transportation system primarily due to construction of the State Route 85 freeway in 1994 and rapid growth in the Santa Clara Valley. Because the vast majority of land use within Saratoga is essentially built-out, future travel demand will be generated by redevelopment, in-fill projects, and additional through traffic. Thus, the primary goal of the Circulation Element is to manage and improve the existing transportation system.

Background

The transportation system in Saratoga was originally developed before the City was incorporated and was based on planning principles for rural communities. These principles included construction of numerous local streets without finished curbs, gutters or sidewalks, extensive use of natural landscaping, and development of an arterial street system that radiated from the Village area along Big Basin Way.

Due to the hilly terrain and natural setting, some City streets include narrow travel lanes that are less than the 12-foot standard used in many urban areas. The City maintains an on-going effort to eliminate sight distance limitations caused by trees and shrubs or by structures built before recent setback standards were implemented. ~~The City has consistently made a conscious effort to retain the rural character of the community while providing adequate capacity and safety for vehicles and other modes of travel.~~

As the City has developed and overall travel demand in the area has increased, the focus of Citywide circulation traffic volumes has shifted from the Village area. The opening of the

SR 85 regional freeway has concentrated traffic demand on Saratoga Avenue. Because of the City's street pattern, some two-lane roadways originally designed as collector streets — have experienced increased traffic volumes. In addition, opportunities to expand alternative travel modes have been limited because of: 1) the original planning principles to minimize the number of sidewalks, 2) insufficient roadway width or right-of-way to accommodate both on-street parking and separate bicycle facilities, and 3) the low-density development pattern that makes transit service less efficient.

The City has consistently made a conscious effort to retain the rural character of the community while providing adequate capacity and safety for vehicles and other modes of travel. Local residential streets are the framework around which the neighborhoods in Saratoga are built. To a great extent, the pattern and design of streets help shape neighborhood image and identity, and can influence whether or not an area feels safe, the degree of communication neighbors have with each other, the degree to which residents of an area use alternative modes for personal travel, and the people's general feelings of well-being and comfort related to their immediate environment.

Regulatory Agencies

The City of Saratoga has jurisdiction over all City streets and City-operated traffic signals. The SR 85 freeway, its ramps and SR 9 (Saratoga-Los Gatos Road and Big Basin Way) are under the jurisdiction of the State of California Department of Transportation (Caltrans). The portion of Saratoga-Sunnyvale Road between the northern City limit at Prospect Road and SR 9 is the "old" SR 85 and is currently under Caltrans jurisdiction. The process of relinquishing this segment to the City of Saratoga has been initiated.

The Santa Clara Valley Transportation Authority (VTA) is an independent special district responsible for congestion management, specific highway improvement projects, countywide transportation planning, and bus and light rail operations in Santa Clara County. The VTA is the Congestion Management Agency (CMA) for jurisdictions within the County and sets the State and Federal funding priorities for improvements affecting Congestion Management Program (CMP) facilities. CMP facilities in Saratoga include SR 85, SR 9 (Saratoga-Los Gatos Road and Big Basin Way), Saratoga-Sunnyvale Road, and Saratoga Avenue (east of SR 85). In Saratoga, the VTA provides fixed-route bus and paratransit service.

The regional transportation planning agency for the San Francisco Bay Area is the Metropolitan Transportation Commission (MTC), which is the clearinghouse for both State and Federal funds for transportation improvements. Each county's CMA, including the VTA, forwards their Capital Improvement Project (CIP) list to MTC for review. MTC prepares the regional priority list based on input from all nine Bay Area counties and submits it to the California Transportation Commission (CTC) and/or the Federal Highway Administration (FHWA) for funding.

Community Input

Input from City of Saratoga residents, business owners and public officials was an integral part of the element update process. Two community workshops were held to elicit public input on: 1) key circulation and scenic roadway issues, and 2) potential measures to provide a balanced and efficient transportation system. The issues raised at these meetings were used to more accurately describe the existing transportation system and to focus the goals, policies, and implementation measures that form the vision of the City's circulation plan.

II. OVERVIEW OF EXISTING TRANSPORTATION SYSTEM

The current use of each travel mode is presented followed by descriptions of each component of the existing transportation system: roadways, bicycle and pedestrian facilities, transit services and facilities, and rail lines. Figure 1 shows a map of the major roadways within Saratoga.

Commute Travel Modes

Saratoga residents use a variety of modes to travel. Table 1 shows the proportional share by travel mode for Saratoga residents commuting to work.

TABLE 1 Travel Mode Share - Saratoga Residents	
Transportation Mode	Share (%)
Drive Alone	89.3
Carpool/Vanpool	7.4
Bus	0.4
Bicycle	0.4
Walk	1.0
Other ¹	1.5
Notes: ¹ Includes motorcycle riders, worked at home, and other modes.	
Source: U.S. Census Transportation Planning Package, 1990.	

According to 1990 Census data, the vast majority of work trips (nearly 90 percent) are made by single-occupant vehicles. Carpools/vanpools or ridesharing comprises the second highest share at 7.4 percent. Transit, bicycle and pedestrian trips comprise less than two percent of the commute trip total. Recent studies conducted in 1999 show similar mode shares at two local elementary schools where approximately 90 percent of students arrive and depart by automobile.

Existing Roadway System

Regional roadway access to Saratoga is provided by three major freeways: State Route (SR) 85, Interstate 280 (I-280), and SR 17. Only SR 85 provides direct access to Saratoga via interchanges at Saratoga Avenue and South De Anza Boulevard (in Cupertino). Access to SR 17 is provided by Saratoga-Los Gatos Road, which is designated as SR 9. Lawrence Expressway also serves regional traffic and links Saratoga to Santa Clara and Sunnyvale.

As shown on Figure 1, the major roadways carry traffic between various areas of Saratoga as well as to other nearby cities. Local roadway access within Saratoga is provided by a network of streets that was specifically designed to discourage cut-through traffic in neighborhood areas. Unfortunately, increased congestion on some of the major roadways, especially near the SR 85/Saratoga Avenue interchange, has led to increased diversion through neighborhoods.

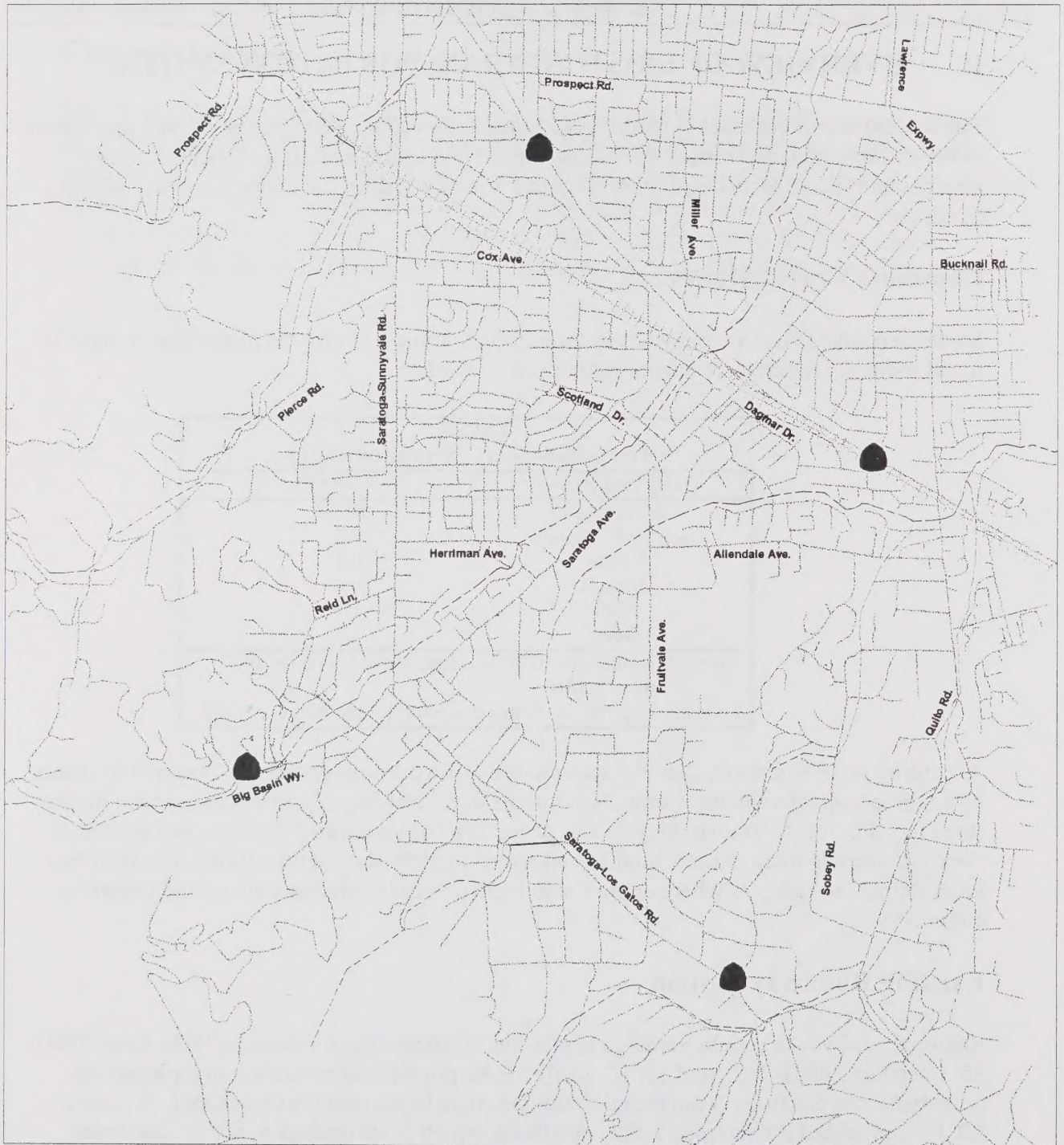


Figure 1

CITY MAP



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Brief descriptions of the key roadways within the City are presented below.

SR 85 is six-lane freeway linking U.S. Highway 101 (US 101) in Mountain View to US 101 in south San Jose. The median lane in both directions is designated for use by High Occupancy Vehicles (HOVs) and motorcycles during peak periods. HOVs include carpools, vanpools and buses. A full-access interchange is provided at Saratoga Avenue between Fruitvale and Cox Avenues.

Saratoga-Los Gatos Road is a two- to four-lane roadway extending between Big Basin Way in Saratoga and SR 17 in Los Gatos. A center two-way left-turn lane is provided on selected segments of this road within Saratoga. Saratoga-Los Gatos Road is designated as SR 9 and is under the jurisdiction of the California Department of Transportation (Caltrans).

Saratoga Avenue is a two- to six-lane street linking Saratoga-Los Gatos Road (SR 9) with Scott Boulevard in the City of Santa Clara. In Saratoga, this street includes two lanes between SR 9 and Fruitvale Avenue, and four lanes north of this point to the City limits.

Saratoga-Sunnyvale Road is a four- to six-lane, north-south road extending between Saratoga Avenue and Prospect Road. North of Prospect Road in the Cities of Cupertino and San Jose, this roadway is designated as South De Anza Boulevard.

Prospect Road is a two- to six-lane east-west roadway extending between Stevens Creek County Park and Saratoga Avenue. Several north-south collector streets connect to Prospect Road through Cupertino including Blaney Avenue, Miller Avenue, and Johnson Avenue. Most of Prospect Road forms the boundary between Saratoga and the Cities of San Jose and Cupertino.

Fruitvale Avenue is a two- to four-lane street linking Saratoga Avenue to Saratoga-Los Gatos Road (SR 9). It is two lanes wide south of Burgundy Way. Fruitvale Avenue is the primary access to West Valley College.

Cox Avenue is an east-west street extending between Saratoga-Sunnyvale Road and Quito Road. This street includes two travel lanes west of Saratoga Avenue and four lanes to the east. Between Prospect Road and Saratoga-Los Gatos Road, Cox Avenue is the only east-west street providing a direct connection across Saratoga between Saratoga-Sunnyvale Road and Quito Road.

Allendale Avenue is a two-lane, east-west roadway linking Fruitvale Avenue and Quito Road. West of Fruitvale Avenue, this street provides access to the Saratoga Civic Center, Post Office, and Redwood Middle School. Access to West Valley College is provided on Allendale Avenue.

Quito Road is a two-to four-lane north-south roadway and essentially forms the City's eastern boundary. Quito Road links Lawrence Expressway (south of Saratoga Avenue) to Saratoga-Los Gatos Road.

Big Basin Way is a two-lane roadway between Saratoga-Los Gatos Road and Pierce Road. West of Pierce Road, this roadway is called Congress Springs Road and connects to Skyline Boulevard (SR 35). *Big Basin Way* is designated as SR 9.

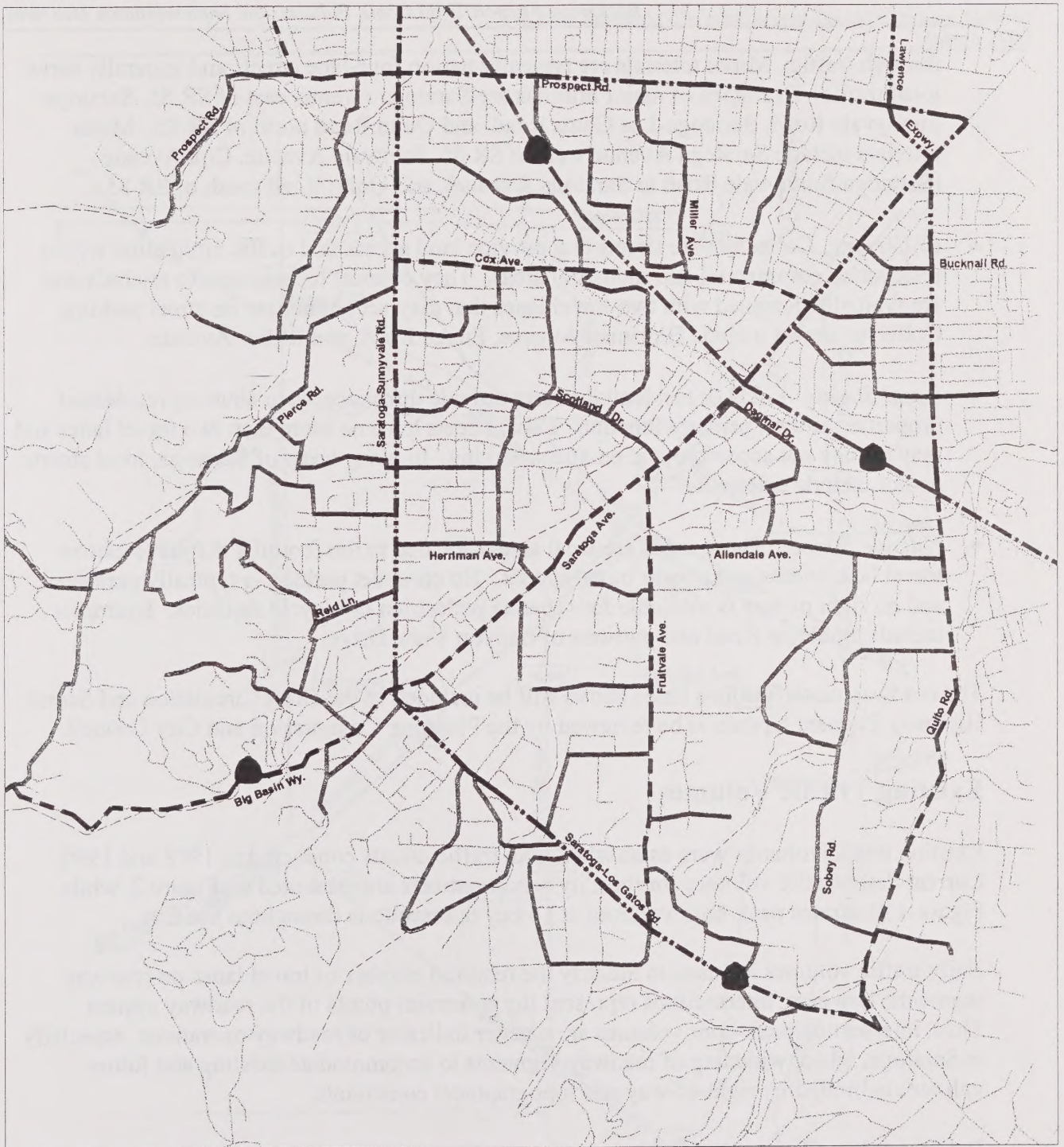
Pierce Road is a two-lane roadway linking Congress Springs Road (SR 9) with Saratoga-Sunnyvale Road. This roadway traverses hilly terrain and provides access to numerous local and collector streets in the western hills.

Functional Roadway Classifications

To better identify the character of a roadway, all streets and highways are classified by their function. For example, some facilities are designed to serve high traffic volumes across the City, while others are designed to serve low volumes and to distribute traffic within a limited area. As a point of reference, the City has used the classification system maintained by the Federal Highway Administration (FHWA) which uses the following classifications: interstate freeway, other freeway or expressway, other principal arterial, minor arterial, collector, and minor collector (for rural areas only). All other streets are assumed to be local streets. A map of the current FHWA classification system that is being reviewed by the City of Saratoga is shown on Figure 2.

The City does not have an officially adopted classification system. Although the current General Plan map identifies some arterial roadways and collector streets, no difference is made between types of arterial roadways (principal/major vs. minor). For discussion purposes, roadways have been classified into seven categories: freeways, expressways, major and minor arterials, collectors, local streets, and hillside streets. Portions of Prospect Road and Quito Road that are located in adjacent jurisdictions may be designated differently by those agencies. General definitions of the roadway classifications and example roadway segments are presented below.

- *Freeways.* Freeways are limited-access, high-speed travelways included in the State and Federal Highway systems. Their purpose is to carry regional through traffic. Access is provided by interchanges with typical spacing of one-mile or greater. No access is provided to adjacent land uses. The only freeway in the City is State Route (SR) 85.
- *Expressways.* Expressways are high-speed, limited-access streets designed to facilitate the movement of high traffic volumes. Expressways are designed to serve both regional through and local traffic and ideally connect other regional roadways and freeways. The only expressway facility within the city limits is a very short segment of Lawrence Expressway north of Saratoga Avenue.
- *Major and Minor Arterials.* Arterial roadways are major streets that primarily serve through traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and major intersections are signalized. This roadway type is divided into two categories: major and minor arterials. Major arterials are typically four- or more lane roadways and serve both local and



- | | |
|---|--------------------|
| — · — Interstate Freeway (Not Applicable) | — — Minor Arterial |
| — · — Other Freeway or Expressway | — — Collector |
| — · — Other Principal Arterial | |



Figure 2

CURRENT FHWA ROADWAY CLASSIFICATIONS

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through traffic. Minor arterials are typically two-to four-lane streets and generally serve local traffic. Examples of major arterials are Saratoga Avenue east of SR 85, Saratoga-Sunnyvale Road, Saratoga-Los Gatos Road, and Quito Road north of SR 85. Minor arterials include Saratoga Avenue west of SR 85, Fruitvale Avenue, Cox Avenue (Saratoga-Sunnyvale Road to Saratoga Avenue), and Quito Road south of SR 85.

- *Collectors.* Collectors are streets that provide land access and traffic circulation within residential, commercial and industrial areas. They connect local streets to arterials and are typically designed with two travel lanes that may accommodate on-street parking. Collector streets include Herriman Avenue, Pierce Road, and Miller Avenue.
- *Local Streets.* Local or residential streets provide direct access to abutting residential properties as their primary function. Local streets have no more than two travel lanes and may or may not accommodate on-street parking. In many areas of Saratoga, local streets do not include sidewalks.
- *Hillside Streets.* These roads are local streets located in the foothills that have narrow travel lane widths and slower travel speeds. No on-street parking is typically permitted and no right of way is available for separate pedestrian or bicycle facilities. Examples include Bohlman Road and portions of Canyon View Drive.

The roadway classifications listed above will be included in the Draft Circulation and Scenic Highway Element Update to be reviewed by the Planning Commission and City Council.

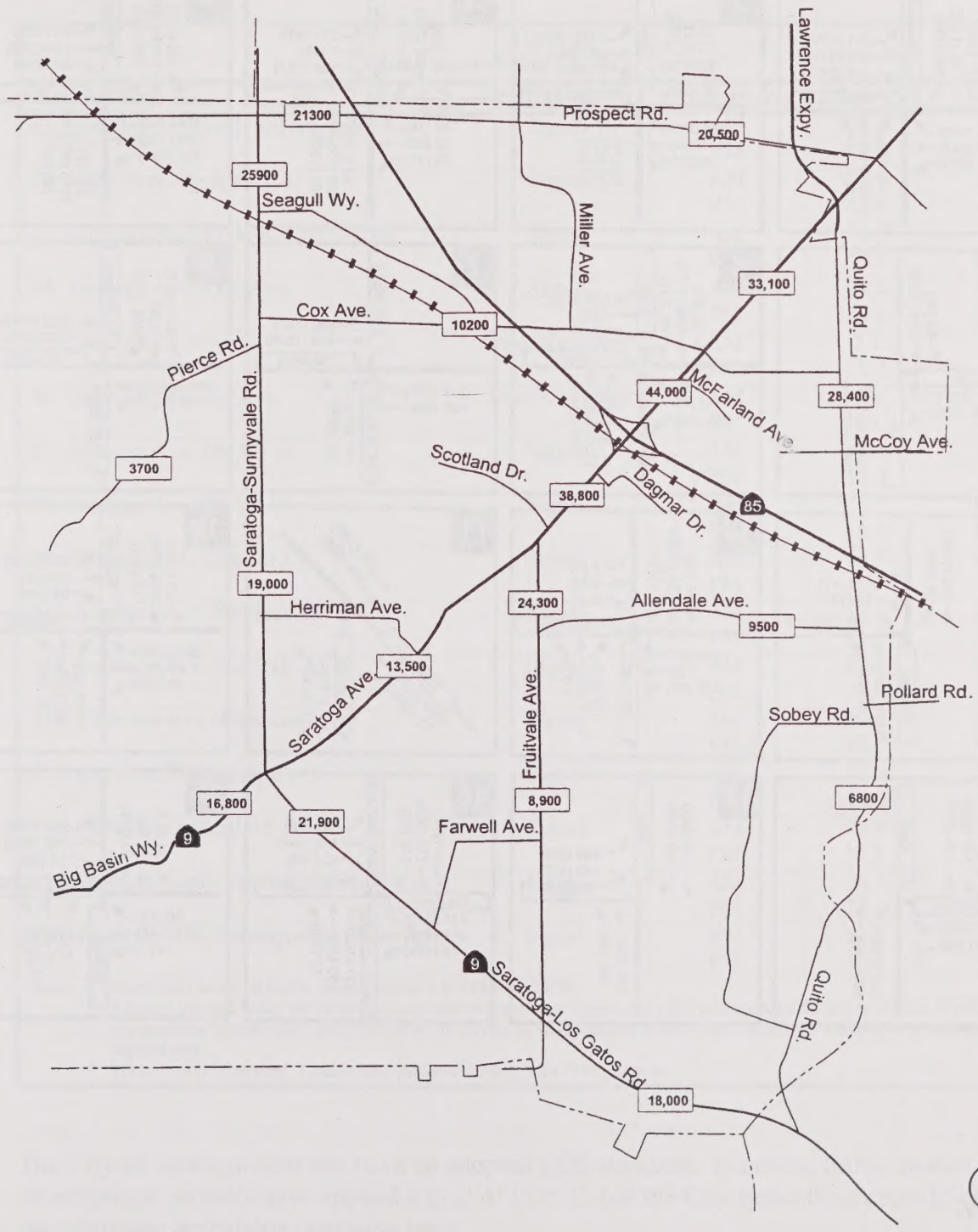
Existing Traffic Volumes

Existing traffic volumes were established with traffic counts conducted in 1998 and 1999. Current daily traffic volumes for the City's major streets are presented on Figure 3, while Figure 4 illustrates peak-hour volumes at 16 key intersections throughout the City.

Daily traffic volumes are used to identify the required number of travel lanes on roadway segments; however, intersections represent the constraint points of the roadway system. Thus, intersection peak-hour volumes are a better indicator of roadway operations, especially in Saratoga, where widening of roadway segments to accommodate existing and future volumes is limited by right-of-way and topographical constraints.

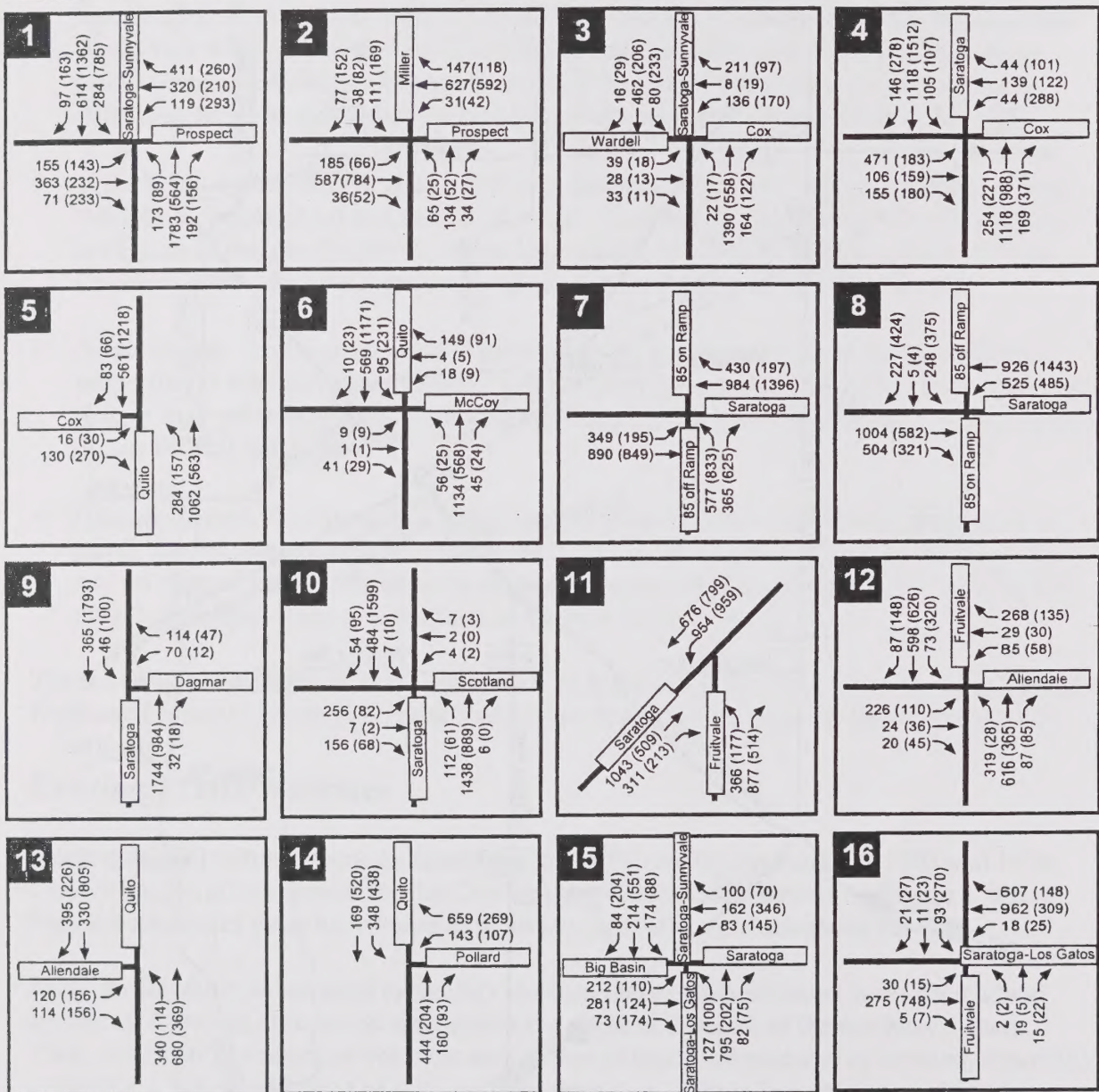
Intersection Operations

The operations of roadways are described with the term *level of service*. Level of service (LOS) is a qualitative description of traffic operations ranging from Level A, or free flow operations with little or no delay, to Level F, or oversaturated conditions with excessive delays. LOS E represents conditions at capacity. Tables describing the ranges of delay at signalized and unsignalized intersections are included in the technical appendix. The existing intersection service levels are presented in Table 2.



Note: Traffic counts obtained in 1998 and 1999

Figure 3 182-13-01	EXISTING DAILY VOLUMES	
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Key:

XX (XX) = AM (PM)

Note: Traffic counts obtained in 1998 and 1999

Figure 4

EXISTING PEAK HOUR VOLUMES



TABLE 2
Existing Intersection Levels of Service¹

Intersection	Traffic Control	Peak Hour	Delay ²	LOS ³
#1 Saratoga-Sunnyvale Rd./Prospect Rd.	Signal	AM PM	29.6 22.8	D C
#2 Miller Ave./Prospect Rd.	Signal	AM PM	17.9 18.6	C C
#3 Saratoga-Sunnyvale Ave./Cox Ave.	Signal	AM PM	14.9 15.9	B- C+
#4 Saratoga Ave./Cox Ave.	Signal	AM PM	25.0 24.2	D+ C-
#5 Quito Rd./Cox Ave.	Two-Way Stop	AM PM	2.1 10.2	A C
#6 Quito Rd./McCoy Ave.	Two-Way Stop	AM PM	3.4 2.2	A A
#7 Saratoga Ave./NB SR 85	Signal	AM PM	16.1 17.3	C+ C
#8 Saratoga Ave./SB SR 85	Signal	AM PM	15.1 16.8	C+ C+
#9 Saratoga Ave./Dagmar Dr.	Signal	AM PM	16.5 8.1	C+ B
#10 Saratoga Ave./Scotland Dr.	Signal	AM PM	13.3 11.2	B- B
#11 Saratoga Ave./Fruitvale Ave.	Signal	AM PM	40.8 29.2	E+ D
#12 Fruitvale Ave./Allendale Ave.	Signal	AM PM	19.0 15.7	C C+
#13 Quito Rd./Allendale Ave.	Signal	AM PM	13.2 12.0	B- B
#14 Quito Rd./Pollard Rd.	Signal	AM PM	29.8 15.9	D C+
#15 Saratoga-Sunnyvale Rd./Saratoga Ave.	Signal	AM PM	26.4 28.3	D D
#16 Fruitvale Ave./Saratoga-Los Gatos Rd.	Signal	AM PM	10.3 11.5	B B

Notes: ¹ Operations based on traffic counts obtained in 1998 and 1999.
² Average stopped delay per vehicle in seconds for signalized intersections and average total delay per vehicle in seconds for unsignalized intersections. Reported level of service at unsignalized intersections represents movement or approach with highest delay.
³ LOS = Level of service. Calculations performed using TRAFFIX program.

The City of Saratoga does not have an adopted LOS standard. Recently, traffic studies for development projects have applied a goal of LOS C, but the City typically accepts LOS D as the minimum acceptable operating level.

The Saratoga-Los Gatos Road/Saratoga Avenue-Big Basin Way intersection is included in the Santa Clara County Congestion Management Program (CMP). CMP-designated intersections have regional significance and are monitored annually by the Valley

Transportation Authority, the congestion management agency for Santa Clara County. In addition to annual monitoring, VTA staff reviews transportation impact analysis reports from local agencies to evaluate the potential transportation impacts of local land use decisions. The LOS standard for CMP intersections is LOS E.

The results in Table 2 show that all of the intersections are currently operating at LOS D or better during both the AM and PM peak hours with one exception. The intersection of Saratoga Avenue/Fruitvale Avenue is operating at LOS E in the AM peak hour according to the operations analysis. This deficiency is primarily caused by the substantial traffic demand generated by West Valley College.

In general, field observations conducted in October 1999 corroborate the results of the level of service calculations. However, observations show that lengthy queues form on southbound Saratoga Avenue north of the SR 85 interchange during the PM peak hour even though the reported LOS is C. At times, the delay caused by the ramp meter on the southbound SR 85 on-ramp allows only a limited volume to pass through the intersection. The resulting traffic counts appear low and the resulting calculated level of service appears good (i.e., LOS C or D).

Roadway Segment Operations

Roadway segments were analyzed based on generalized volume thresholds (i.e., capacities) of 18,000, 36,000, and 54,000 vehicles per day (vpd) for two-, four-, and six-lane roadways, respectively. These planning-level thresholds are usually applied to streets with intermittent driveways serving abutting properties and speed limits of 35 to 45 miles per hour. **It is important to note that these thresholds are not the maximum volume that can be accommodated by the roadway, but a planning "capacity" for purposes of identifying congested areas.**

The capacity of several two-lane roadway segments was assumed to be ~~12,000 to 15,000 vpd~~ **substantially lower** based on hilly terrain, narrow travel lanes, speed limits of 25 to 35 miles per hour or other factors (e.g., extensive on-street parking). These segments include Pierce Road, Big Basin Way, and Quito Road south of Cox Avenue. For purposes of this analysis, roadway segment operations are classified as under, near, or over capacity. Near capacity refers to segments with volumes between 80 and 100 percent of their planning volume threshold.

Table 3 shows the existing operations of the key roadway segments identified on Figure 3. The results in Table 3 show that ~~five~~ **four** of the eighteen study roadway segments are operating at an unacceptable level (LOS E or F) **near capacity** on a daily basis. The two areas of congestion include: 1) Saratoga Avenue in the vicinity of the SR 85 interchange, and 2) SR 9 near the Village. As noted previously, congested daily operations can indicate that overall traffic demand meets or exceeds the capacity of a given segment. However, peak-hour intersection operations and potential intersection improvements should be evaluated prior to recommending widening of roadway segments.

TABLE 3
Existing Roadway Segment Levels of Service¹

Roadway Segment	Existing Volume	Planning Capacity	% of Capacity	Under, Near or Over Capacity
Prospect Rd. (Saratoga-Sunnyvale Rd. to Miller Ave.)	21,300	36,000	59%	Under
Prospect Rd. (Miller Ave. to Lawrence Expy.)	20,500	36,000	57%	Under
Saratoga-Sunnyvale Rd. (Prospect Rd. to Cox Ave.)	25,900	36,000	72%	Under
Saratoga-Sunnyvale Rd. (Cox Ave. to Saratoga Ave.)	19,000	36,000	53%	Under
Pierce Rd. (Surrey Ln. to Comer Dr.)	3,700	12,000 4,500	30% 82%	Under Near
Cox Ave. (Saratoga-Sunnyvale Rd. to Saratoga Ave.)	10,200	18,000	57%	Under
Saratoga Ave. (Lawrence Expy. To Cox Ave.)	33,100	36,000	92%	Near
Saratoga Ave. (Cox Ave. to SR 85)	44,000	36,000	122%	Over
Saratoga Ave. (SR 85 to Fruitvale Ave.)	38,800	36,000	108%	Over
Saratoga Ave. (Fruitvale Ave. to Saratoga-Sunnyvale Rd.)	13,500	18,000	75%	Under
Big Basin Wy. (Saratoga-Sunnyvale Rd. to Pierce Rd.)	16,800	15,000	112%	Over
Fruitvale Ave. (Saratoga Ave. to Allendale Ave.)	24,300	36,000	68%	Under
Fruitvale Ave. (Allendale Ave. to Saratoga-Los Gatos Rd.)	8,900	18,000	49%	Under
Allendale Ave. (Fruitvale Ave. to Quito Rd.)	9,500	18,000	53%	Under
Quito Rd. (Saratoga Ave. to Allendale Ave.)	28,400	36,000	79%	Under
Quito Rd. (Allendale Ave. to Saratoga-Los Gatos Rd.)	6,800	15,000	45%	Under
Saratoga-Los Gatos Rd. (Saratoga Ave. to Fruitvale Ave.)	21,900	18,000	122%	Over
Saratoga-Los Gatos Rd. (Fruitvale Ave. to Quito Rd.)	18,000	36,000	50%	Under
Note: ¹ Count data obtained in 1998 and 1999. Source: Fehr & Peers Associates, Inc.				

Truck Traffic

Truck traffic is not an existing problem in the City of Saratoga. The major state highways leading into and traversing the City are not high volume truck routes. SR 9 west of the City is a two-lane road with numerous curves and steep grades and is not conducive to truck travel. Trucks over four (4) tons are not permitted on SR 85. In general, most large trucks travel on Saratoga streets only to make local deliveries or pick-ups.

Other Traffic Issues

Several issues regarding traffic circulation throughout the City have been identified at public meetings and through communications with City Community Development Department staff. These issues are listed below followed by a brief discussion of each.

Neighborhood Traffic Problems – Citizens in several neighborhoods have indicated that the traffic volume or travel speeds on some local streets have increased to an unacceptable level. Many cite the change in travel patterns due to SR 85 as the primary cause.

The daily capacities shown in Table 3 apply to arterial roadways designed to carry substantial traffic volumes. Even a two-lane collector road with numerous access driveways is physically capable of serving traffic volumes in excess of 7,500 vpd without congestion depending on intersection operations, available gaps in traffic, and lane widths. For collector and local streets in residential areas, the volume of traffic generally accepted or tolerated by residents is significantly lower. This threshold is referred to as the “environmental capacity” of a roadway. The environmental capacity relates to the perceived speed of traffic, how difficult it is for residents to back out of driveways, and the overall perception of safety. The environmental capacity of a collector street is often cited as 3,000 to 3,500 vpd, while a volume of between 1,500 to 2,000 vpd would represent the maximum volume that could be tolerated by residents of a local street.

Residents of some neighborhoods are interested in traffic calming techniques to mitigate these problems. Traffic calming measures include changes in street alignment, installation of barriers or other physical devices, and enforcement to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes. Increased enforcement has been identified as a key issue at public meetings regarding Citywide traffic issues.

Methods of evaluating the need for traffic calming measures include the application of environmental capacity thresholds or the use of a quantitative measure to identify neighborhood traffic impacts such as the Traffic Infusion on Residential Environments (TIRE) index. This index is a numerical representation of a resident’s perception of the effect of street traffic on activities such as walking, cycling, playing, and backing a vehicle out of a driveway and is based upon the existing daily two-way volume. Changes in the TIRE index are used to establish levels of significance for discernible changes in daily traffic volume. The TIRE index and associated volume thresholds are included in the appendix.

Congestion at Schools – Over the last five years, vehicle congestion around several City schools has become a controversial issue. The increased traffic is due in part to increased student population, but is more related to a trend in students that are driven to school instead of walking or bicycling. Most elementary schools in Saratoga generate a higher than typical number of vehicle trips due to a lack of sidewalks on many local streets and the ability for students to attend any school within the City. Student pedestrian and bicycle safety is a key concern for residents.

Special Event/Concerts – The traffic and parking demand for events at both the Paul Masson Winery and Villa Montalvo often cause delays for local traffic. Major events at the winery primarily occur on weekends and affect travel through the Village and on Pierce Road. Off-site parking at West Valley College and shuttle service have been used to reduce traffic for Villa Montalvo events.

Transit

The Santa Clara Valley Transportation Authority (VTA) operates bus, light rail transit, and paratransit service throughout Santa Clara County. Bus transit service within the City of Saratoga includes six fixed routes (Routes 26, 27, 53, 54, 57, and 58), one commuter route (Route 102 on SR 85), and paratransit service (dial-a-ride service for qualified individuals). Figure 5 illustrates the bus route paths operating within the City.

All of the fixed bus routes operating through the City terminate at West Valley College and only provide service on Saratoga-Sunnyvale Road, Saratoga Avenue, Saratoga-Los Gatos Road, Quito Road, and Allendale Avenue. No service is provided on Cox Avenue, most of Fruitvale Avenue, and the southern half of Quito Road. According to current VTA ridership statistics or load factors, only five to 21 percent of the available seat capacity is used on these routes. At public meetings, residents have indicated that the time and number of transfers required to access major destinations (e.g., regional malls, downtown San Jose) are deterrents to transit use.

Paratransit service is operated under contract with OUTREACH, a private, non-profit paratransit broker. This door-to-door service is provided to riders whom meet the eligibility requirements established by the Americans with Disabilities Act (ADA).

Bicycle Facilities

Bicycle facilities include bike paths, bike lanes, and bike routes. Definitions of these facility classifications are presented below.

- *Bike Paths.* Bike paths are paved facilities designated for bicycle use that are physically separated from roadways by space or a physical barrier.
- *Bike Lanes.* Bike lanes are lanes on the outside edge of roadways reserved for the exclusive use of bicycles, and designated with special signing and pavement markings.
- *Bike Routes.* Bike routes are roadways recommended for bicycle use and often connect to bike lanes and bike paths. Routes are designated with signs only and may not include additional pavement width.

Saratoga has a limited number of bicycle facilities. Figure 6 depicts the locations of the existing bike lanes, paths, and routes. The paths shown on Figure 6 are multi-use trails and serve both bicycles and pedestrians.



- | | |
|----------|--|
| Route 26 | Route 57 |
| Route 27 | Route 58 |
| Route 53 | Express Route 102 (No Stops in Saratoga) |
| Route 54 | Route Numbers |

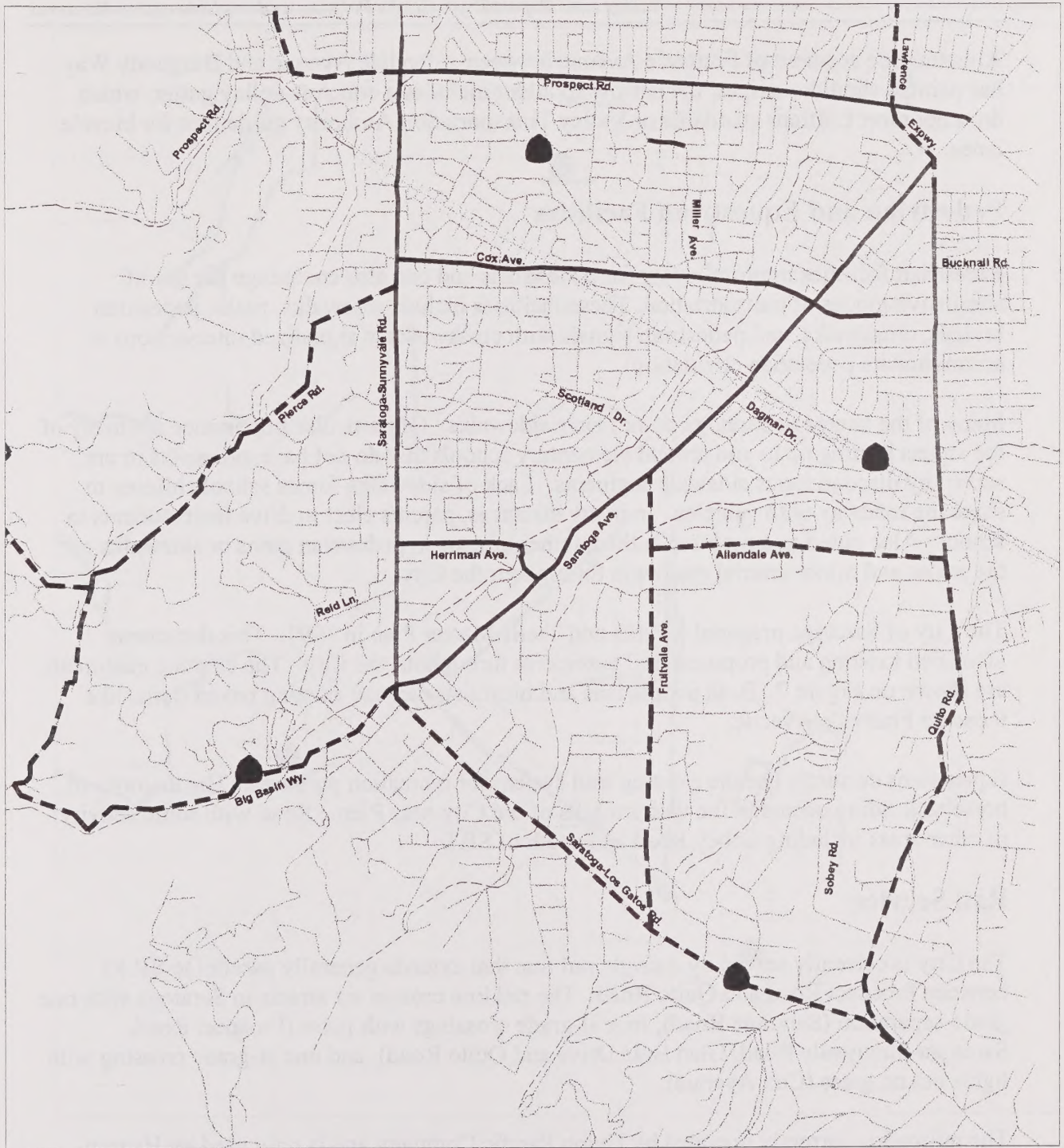


Figure 5

EXISTING TRANSIT SERVICE



995-182-1



--- Bicycle Routes (Class III Facilities)

— Bicycle Lanes (Class II Facilities)

--- Expressway Segments (Bicycles Permitted)

— Bicycle Paths (Class I Facilities) - See Existing Trail Easements

Note: Based on City designation. Some facilities do not include signage or adequate bike lane width.



Figure 6

EXISTING BICYCLE FACILITIES MAP



995-182-1

Although the segment of Fruitvale Avenue between Allendale Avenue and Burgundy Way has painted shoulder stripes, the narrow shoulder includes a concrete valley gutter, which does not meet Caltrans standards or Valley Transportation Authority guidelines for bicycle lanes.

Pedestrian and Equestrian Facilities

Pedestrian facilities improve safety for pedestrians and can also encourage the use of alternative modes of transportation. These facilities include sidewalks, paths, pedestrian bridges, crosswalks, and pedestrian signals with crosswalks at signalized intersections to accommodate pedestrian circulation.

Many of the streets in Saratoga do not have sidewalks. Of particular importance are many of the streets leading up to and around elementary schools that do not have sidewalks or are served by discontinuous sidewalk segments. Lack of sidewalks forces school children to share the roadway with vehicles. In many instances, parents elect to drive their students to school. Also noted as a problem is the number of gaps in pedestrian paths or sidewalks on the major and minor arterial roadways throughout the City.

The City of Saratoga prepared a Parks and Trails Master Plan in 1991. This document identified existing and proposed trail easements throughout the City. The existing easements are shown on Figure 7. Both pedestrians and bicyclists can use existing paved trails, like those on Fruitvale Avenue.

Equestrians currently use the existing trail system for recreation purposes. The majority of horseback riding occurs in the western hills of the City near Pierce Road with some activity in other areas including Sobey Road and south of SR 9.

Rail Service

The City is currently served by a single rail line that extends generally parallel to SR 85 between Prospect Road and Quito Road. The rail line crosses six streets in Saratoga with one grade-separation (Saratoga Road), four at-grade crossings with gates (Prospect Road, Saratoga-Sunnyvale Road, Glen Brae Drive and Quito Road), and one at-grade crossing with lights but no gates (Cox Avenue).

The railroad is currently operated by Union Pacific Company and is only used by Hansen-Permanente (formerly Kaiser-Permanente) Concrete. Trains currently operate between 1:00 pm and 6:00 pm on Mondays, Wednesdays, and Fridays. Trains do not stop within the City and do not substantially impact vehicular traffic.

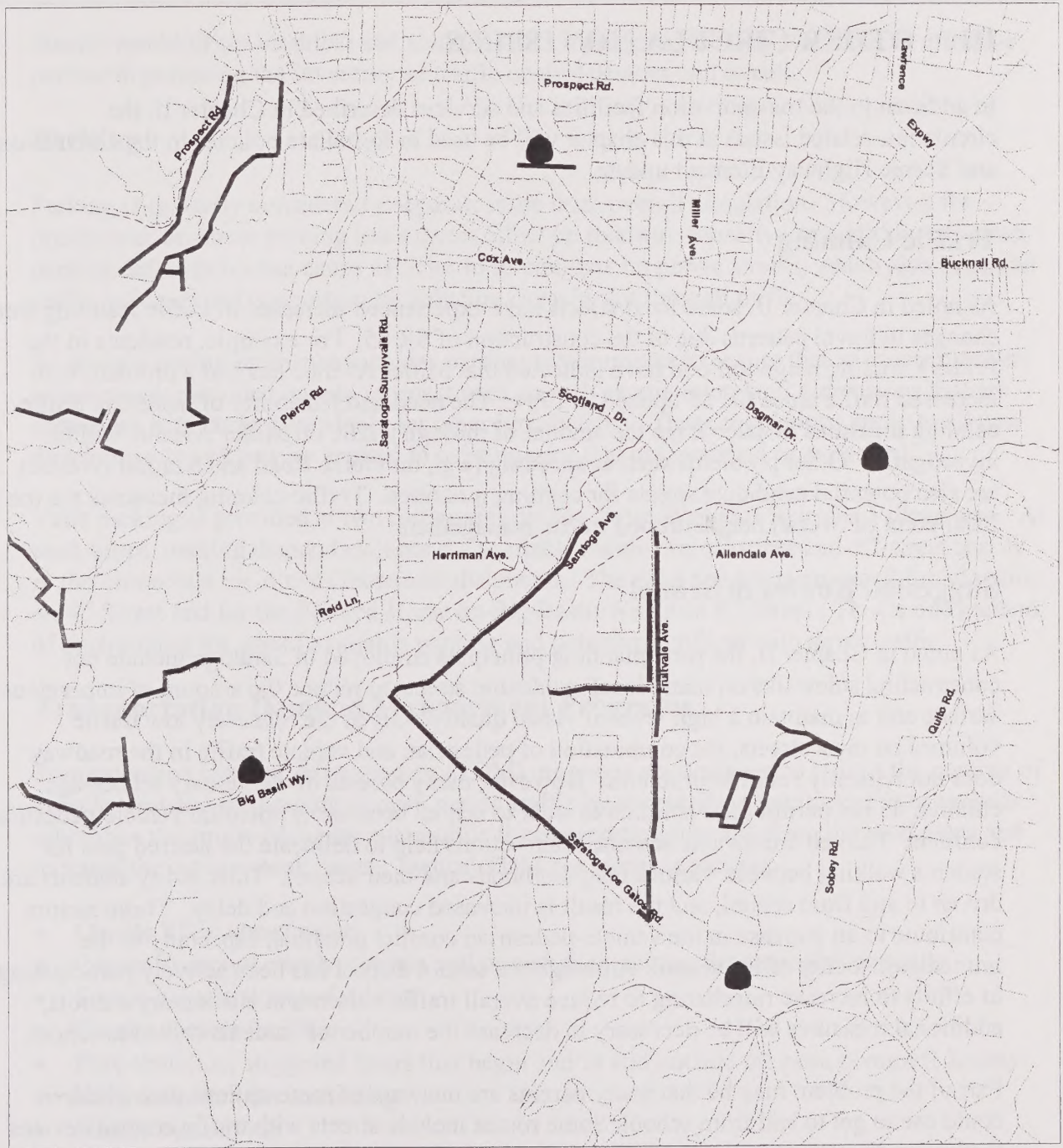


Figure 7

EXISTING TRAIL EASEMENTS

995-182-1



III. OTHER CIRCULATION ISSUES

In addition to the transportation facilities and services described in Chapter II, the circulation-related issues in this chapter will be used to formulate policies in the Circulation and Scenic Highway Element update.

Traffic Calming

As noted in Chapter II, some local streets have experienced increases in traffic resulting from changes in travel patterns due to the construction of SR 85. For example, residents in the Prides Crossing neighborhood have indicated that Miller Avenue has had a problem with increased traffic since SR 85 opened in 1994. The need and feasibility of installing traffic calming measures to discourage the amount of through traffic on Miller Avenue will be investigated. Other problems such as speeding (e.g., on Pierce Road and Seagull Avenue) are also potential candidate streets for calming measures. Traffic calming measures are the focal point of overall neighborhood traffic management.

Suggested Routes to School

As noted in Chapter II, the rural planning principles employed in Saratoga include not constructing sidewalks on many local residential streets to reduce the amount of impervious surface and to maintain a high level of visual quality. Given the relatively low traffic volumes on most streets, the combination of pedestrian and vehicle traffic in the roadway does not typically result in problems. However, many parents of elementary school-age children do not permit their children to walk to school because of potential vehicle-pedestrian conflicts. Painted crosswalks at some intersections help to delineate the desired path for students walking between various neighborhoods and their school. Thus, many students are driven to and from school, and the result is increased congestion and delay. These factors contribute to an increase in the vehicle-pedestrian conflict potential, especially in the immediate vicinity of the school. Although the school district has been actively participating in efforts to increase ridesharing to reduce overall traffic volumes at elementary schools, additional measures will be necessary to decrease the number of students driven to school.

Part of the problem may be that many parents are unaware of route options their children could use to get to and from school. Some routes include streets with traffic control devices that make drivers more aware of other vehicular and pedestrian traffic. For example, students crossing at a stop sign-controlled intersection is preferable over crossing at an uncontrolled location.

The Saratoga Union School District has not formally adopted a Suggested Routes to School Program. This program would help parents identify appropriate travel paths for student pedestrians and bicyclists. Implementation of such a program could also help to reduce vehicle trip generation at most school locations and through neighborhoods. Although the

district would likely establish and maintain such a program, the City would be an effective partner in preparing the inventory of traffic control devices and streets.

Parking

Parking is typically considered a separate issue from overall circulation. However, the presence of on-street parking has a direct effect on roadway capacity. In addition, off-street parking deficiencies can cause vehicles to re-circulate on public streets, which also increases traffic volumes and congestion by reducing capacity for through traffic.

Saratoga's zoning ordinance includes parking requirements to ensure that adequate numbers of spaces are provided on-site for most uses, as well as minimum stall dimensions that are consistent with current standards for other jurisdictions. These regulations apply to all new developments and may be applied to existing uses that are modified or expanded.

Valet parking is provided at two restaurants on Big Basin Way (SR 9) in the Village area. At peak times, parking demand exceeds the available number of on-street and off-street spaces in the immediate vicinity of these establishments. The valet service is provided for Viaggios on 4th Street and for the Plumed Horse on Big Basin Way past 4th Street. This is one method of maximizing the use of available parking and reducing conflicts with street traffic.

Transportation Demand Management Programs

Transportation Demand Management (TDM) programs are designed to reduce the number of vehicle trips and the amount of peak period traffic by encouraging employees to use modes other than the single-occupant automobile for transportation to and from the workplace and to travel during non-peak times. Typical TDM components include:

- On-site TDM coordinator
- Carpool/vanpool match program and preferential parking for carpools/vanpools
- Secure bicycle storage facilities
- On-site shower facilities
- Flex-time (i.e., staggered hours that begin and/or end outside the peak commute hours)
- Provisions for telecommuting
- Shuttle bus service
- Guaranteed ride home program
- Cash incentives/Transit subsidies/On-site transit pass sales
- Education programs

The City does not have adopted policies or implementation programs regarding specific TDM measures. Recent court decisions have restricted the methods by which jurisdictions can require TDM measures for developments. Typically, TDM measures are included as part of a project through the development agreement process for new projects or through approval of use permit modifications for existing developments.

IV. SCENIC HIGHWAYS AND CORRIDORS

Background

The undulating terrain and extensive natural and cultivated foliage in and around Saratoga provide scenic drives throughout the City. As development in the hillside areas has increased, the City has employed strict policies to preserve the natural beauty of the mountains. In addition, many of the City's collector and local streets are very attractive. A scenic highway provides the motorist with a continuous, varied visual experience. Scenic highways are selected by how pleasing the field of vision is for touring vehicles.

Roadways can be officially designated as "scenic" through either the State Scenic Highways program or through the Santa Clara County Scenic Highways program. The State Scenic Highway Element's legislative authority was passed into State law on April 16, 1971. Saratoga adopted its Scenic Highways Element in 1974. The most recent Guidelines for the Official Designation of Scenic Highways was updated by Caltrans in March 1996. The purpose of the element is to inventory scenic corridors and to develop plans to protect them. The Master Plan for Scenic Highways identifies those highways that are eligible for official designation as State Scenic Highways. Eligible highways can only become officially designated by the State after the local jurisdiction has adopted and implemented a plan to protect and enhance the scenic corridor. A detailed list of current officially designated highways and eligible routes is maintained by Caltrans and is available on its web site (www.dot.ca.gov).

Several steps are required for an eligible highway to receive an official designation. A city or county with jurisdiction over lands adjacent to the highway must first inspect and evaluate the route to determine if: (1) it meets the current scenic highway criteria, and (2) the extent to which, if any, development has intruded on the scenic views. Next, the jurisdiction must submit a Resolution of Intent Package to the Departmental Transportation Advisory Committee (DTAC) through the appropriate Caltrans district office. The package should include a Resolution of Intent by the local governing body, maps showing the scenic corridor and existing zoning, a map overlay of development in the corridor, a narrative description of the scenic elements, and a videotape illustrating a representative portion of the segment. If the DTAC evaluates the information and concurs that the scenic criteria are met, then the jurisdiction must prepare and adopt a scenic corridor protection program. Once DTAC determines that the proposed program meets the legislative standards, the committee makes a formal recommendation that the Caltrans Director designate the highway as scenic.

State Scenic Highways rely on local zoning and other measures for maintenance and protection. The State Department of Public Works must be convinced that local government agencies have taken sufficient steps to protect the scenic corridor by regulating land use and the intensity of development. The State protects the highway by landscaping and by securing adjacent property easements to protect and enhance the motorists' view. Easements allow control of potential visual intrusions such as outdoor advertising, structure design and appearance, earthmoving, and inappropriate landscaping.

Besides scenic beauty, a highway must meet the standards of a complete highway to qualify as an officially designated scenic highway. A complete highway incorporates safety, utility, economy and beauty and must be reviewed by State staff. Upon official designation, the route is officially delineated on maps and publications and posted with the California Poppy Scenic Highway emblem.

County roadways may be designated County Scenic Highways and are protected by the Santa Clara County zoning ordinance which requires 100-foot setbacks for buildings and structures along the scenic route. The County Board of Supervisors, on advice from the State Department of Transportation, designates those roads that qualify as officially designated County Scenic Highways.

Existing Scenic Corridors

Currently, SR 9 is officially designated as a State Scenic Highway Corridor from the Los Gatos city limit (east of Saratoga), through the Village, to SR 35/Skyline Boulevard at the Santa Cruz County Line (i.e., at Saratoga Gap). Four roadway segments are currently designated as County Scenic Roadways: Skyline Boulevard (Saratoga Gap to Loma Prieta), Congress Springs Road (Saratoga Gap to the Saratoga City limit), Bohlman Road/Montevian Road, and Sanborn Road.

V. FUTURE CONDITIONS

The City of Saratoga is essentially built out with the majority of vacant parcels located in the western and southern hillside areas. These areas are typically zoned for single-family residential development at low densities. Some redevelopment in the City is projected, however, the commercial areas are generally well-established and substantial traffic growth from land uses in the City is expected to be limited. The vast majority of increases in traffic volumes is expected to result from increased through traffic; that is, vehicles that do not have an origin or destination in Saratoga.

Future Traffic Volumes

Future traffic volumes for the major streets in Saratoga were developed based on forecasts from the Countywide model maintained by the Center for Urban Analysis, a branch of the Santa Clara County Planning Division. The Countywide model includes a roadway network of the major streets and highways in the County plus land use aggregated for specific geographic areas. Models representing 1997 and 2025 roadways and land uses were used for this analysis. The land use assumptions are based on Projections '98, a set of forecasts prepared by the Association of Bay Area Governments (ABAG). A review of the land use inputs show that the total population increase between 1997 and 2025 is slightly more than 6,000 persons, while the total number of jobs in the City is expected to increase by approximately 1,100 during this period. Both the population and employment projections are being reviewed by City staff and will be revised for future ABAG projections.

AM and PM peak hour traffic forecasts were obtained from base year (1997) and future year (2025) conditions roadway segments. The traffic forecasts were used to factor existing AM and PM peak hour intersection traffic volumes using an adjustment technique called the Furness process. At some locations, the model traffic volumes are considered conservative (i.e., higher than expected) because the model roadway network is skeletal. It does not include most of the collector streets that connect to the major and minor arterial roadways that would also carry some traffic. Therefore, all of the traffic is projected on the major roadways only.

Future Traffic Operations

The final future year traffic volumes were then input to level of service calculations to estimate intersection operations in 2025, assuming no new roadway improvements in the City. Some adjustments for signal timing or phasing were incorporated, provided they did not require modifications to the type of turn permitted in each lane. A summary of the 2025 levels of service is presented in Table 4.

Implementation Measures

- CI.6.10 Review Subdivision Ordinance street standards for adequacy and prepare illustrations of corresponding roadway cross-sections.
- CI.6.11 Require a sight distance analysis to ensure adequate site access for variances from street design standards proposed by the City or by private developers. Use Caltrans design standards as guidelines for sight distance studies.
- CI.6.12 Encourage residents of streets and roads believed to have historic merit to nominate those rights-of-way for designation as heritage lanes through the Heritage Preservation Commission.
- CI.6.12a Design commercial areas with pedestrian amenities, shade trees, and on-street parking to create inviting environments.
- CI.6.13 The designation of Heritage Lane shall not preclude City action necessary to guarantee safe access for emergency vehicles while maintaining the integrity of the existing heritage lane.

PARKING SUPPLY AND MANAGEMENT

Goals

- CI.7.0a Provide adequate parking for non-residential uses to minimize intrusion into adjacent neighborhoods.
- CI.7.0b Provide on-street parking spaces in commercial areas that provide direct access to abutting properties while requiring off-street public and private parking lots to serve the majority of the demand.

Policies

- CI.7.1 Review on-street parking policies and utilization in the Village area.
- CI.7.2 Designate curb parking in the Village area for short-term use by those visiting businesses and public facilities.
- CI.7.3 Encourage the location of parking lots behind buildings for development projects to minimize the potential for pedestrian-vehicle conflicts to emphasize buildings' connections to the street and to maximize pedestrian access and safety.

- CI.7.4 Encourage the use of carpools and vanpools by providing preferential spaces as appropriate.

Implementation Measures

- CI.7.5 Enforce parking ordinances in terms of time limits and zones.

- CI.7.5a Establish time limits for on-street parking in commercial areas.

- CI.7.6 Adopt design standards for parking stalls, aisles and driveways for on-street and off-street facilities.



City Limit

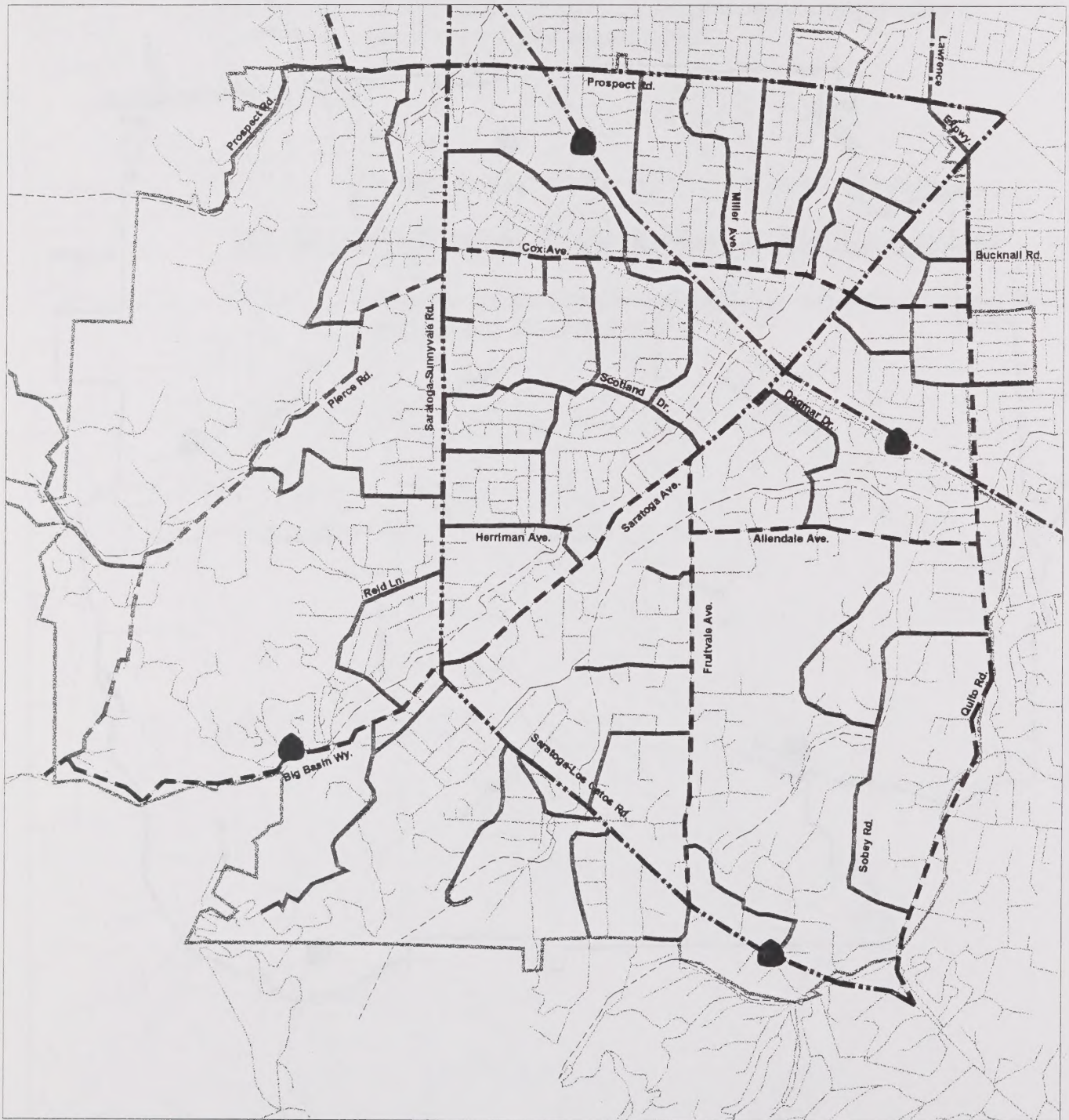


Figure C-1

EXISTING AND PROPOSED ROADWAYS

995-182-2





- Interstate Freeway (Not Applicable)
- Other Freeway or Expressway
- Major Arterial

- Minor Arterial
- Collector



Figure C-2

PROPOSED ROADWAY CLASSIFICATIONS

995-182-2



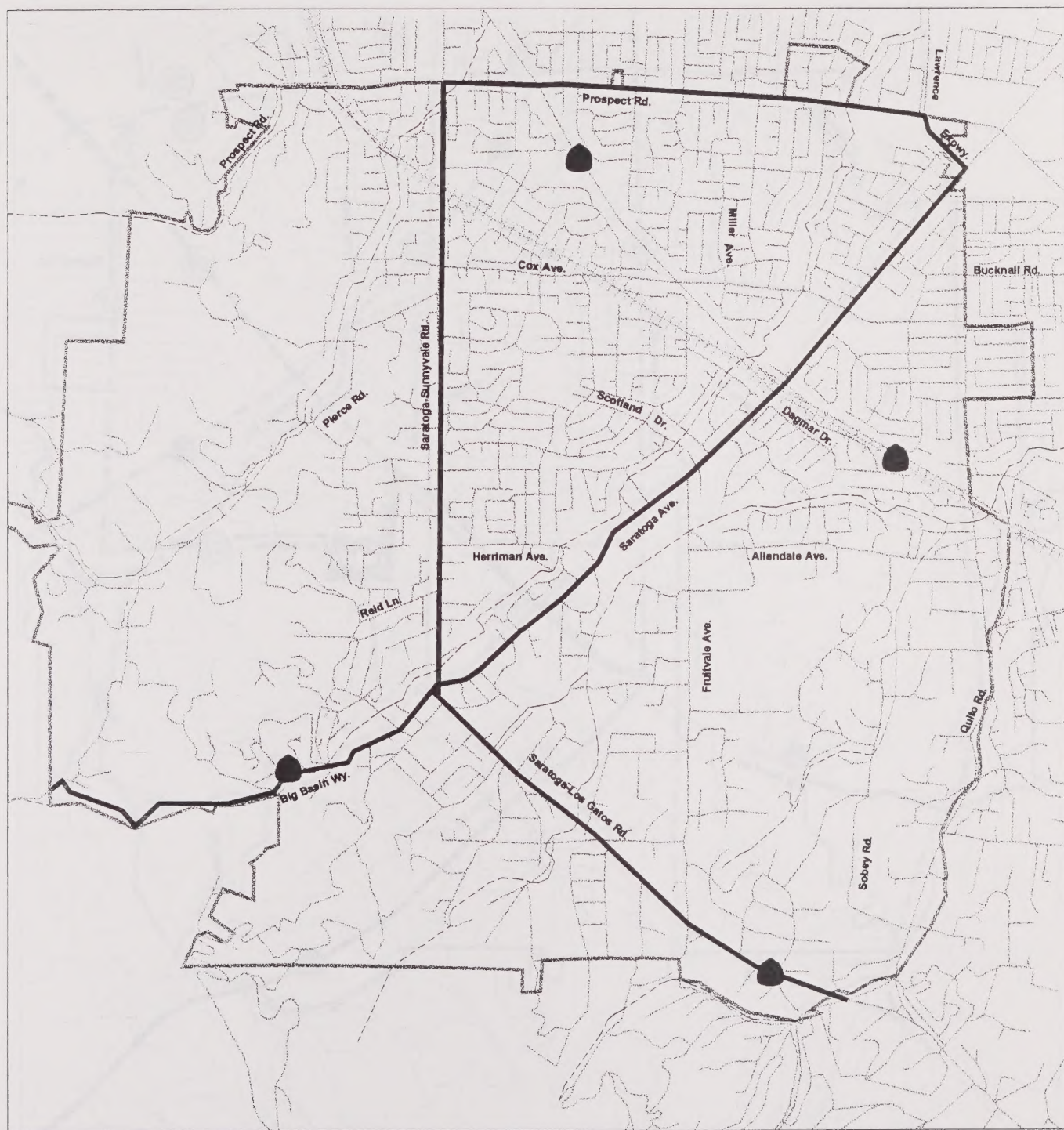
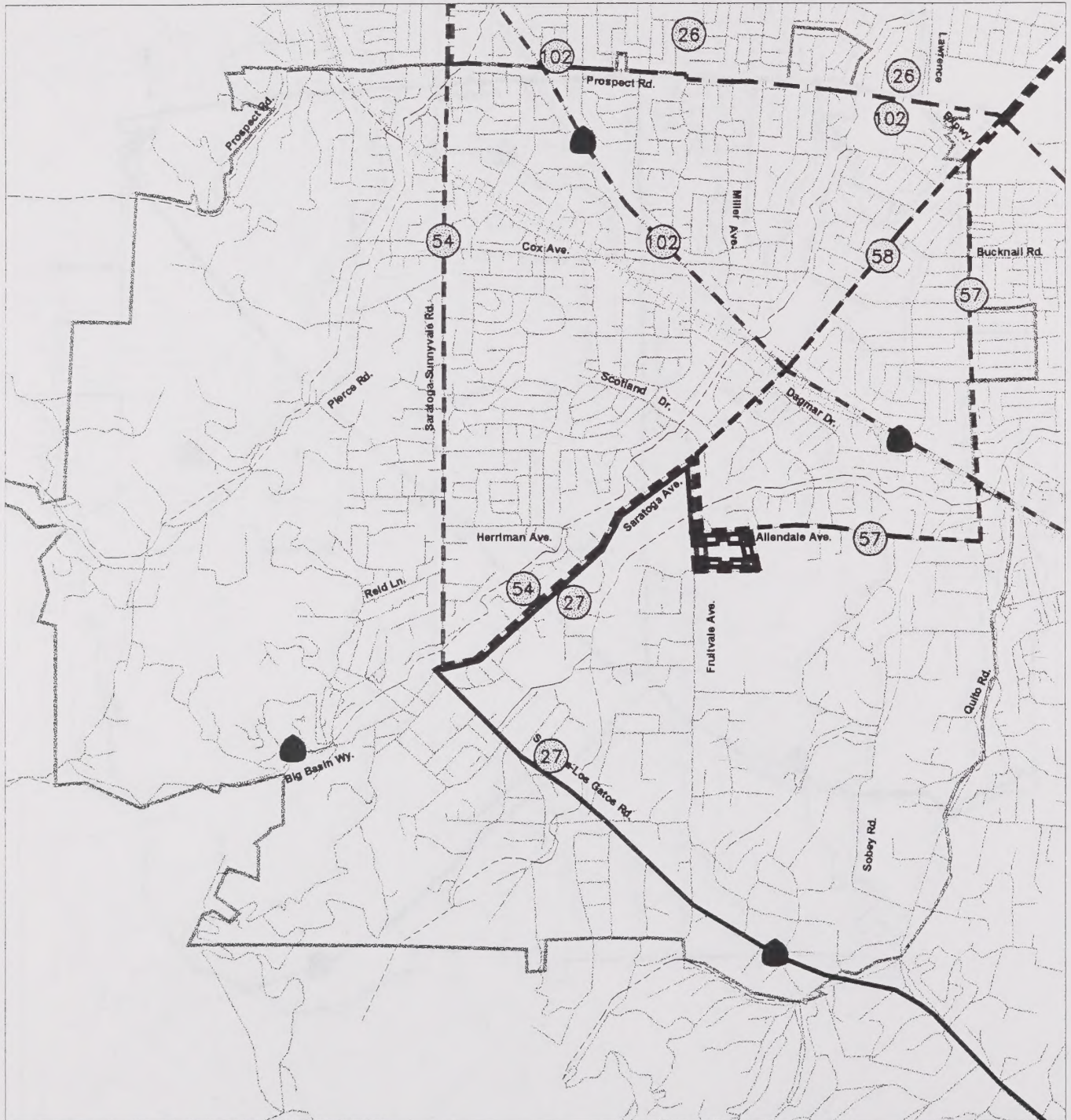


Figure C-3

TRUCK ROUTES

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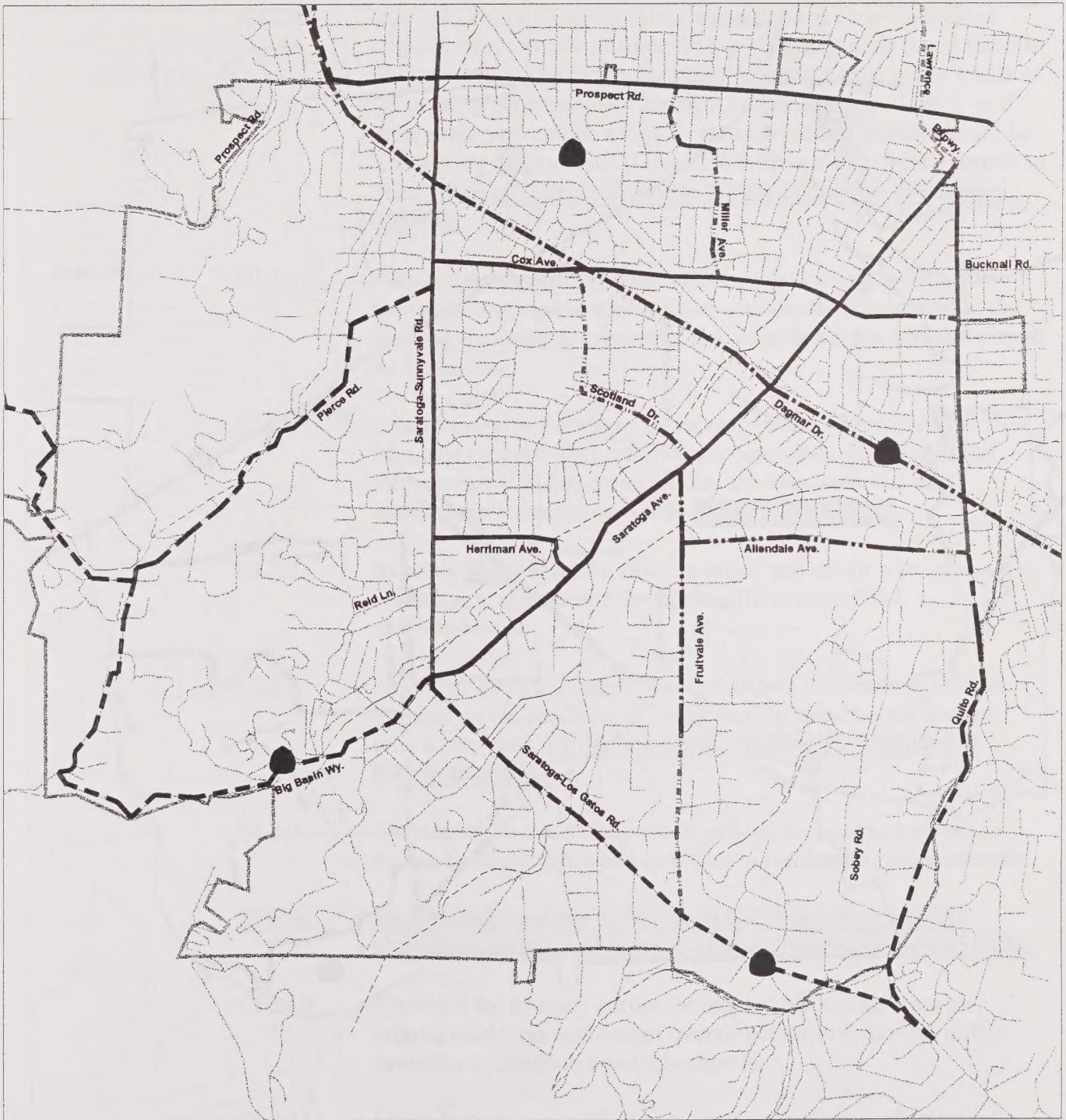
- | | |
|------------|--|
| — Route 26 | --- Route 57 |
| — Route 27 | --- Route 58 |
| — Route 53 | --- Express Route 102 (No Stops in Saratoga) |
| — Route 54 | (27) Route Numbers |

Figure C-4

EXISTING TRANSIT SERVICE

995-182-2





Existing

- N/A Bicycle Paths (Class I Facilities)
- See Existing Trail Easements (Developed)
- Bicycle Lanes (Class II Facilities)
- - - Bicycle Routes (Class III Facilities)
- - - Expressway Segments (Bicycles Permitted)

Proposed

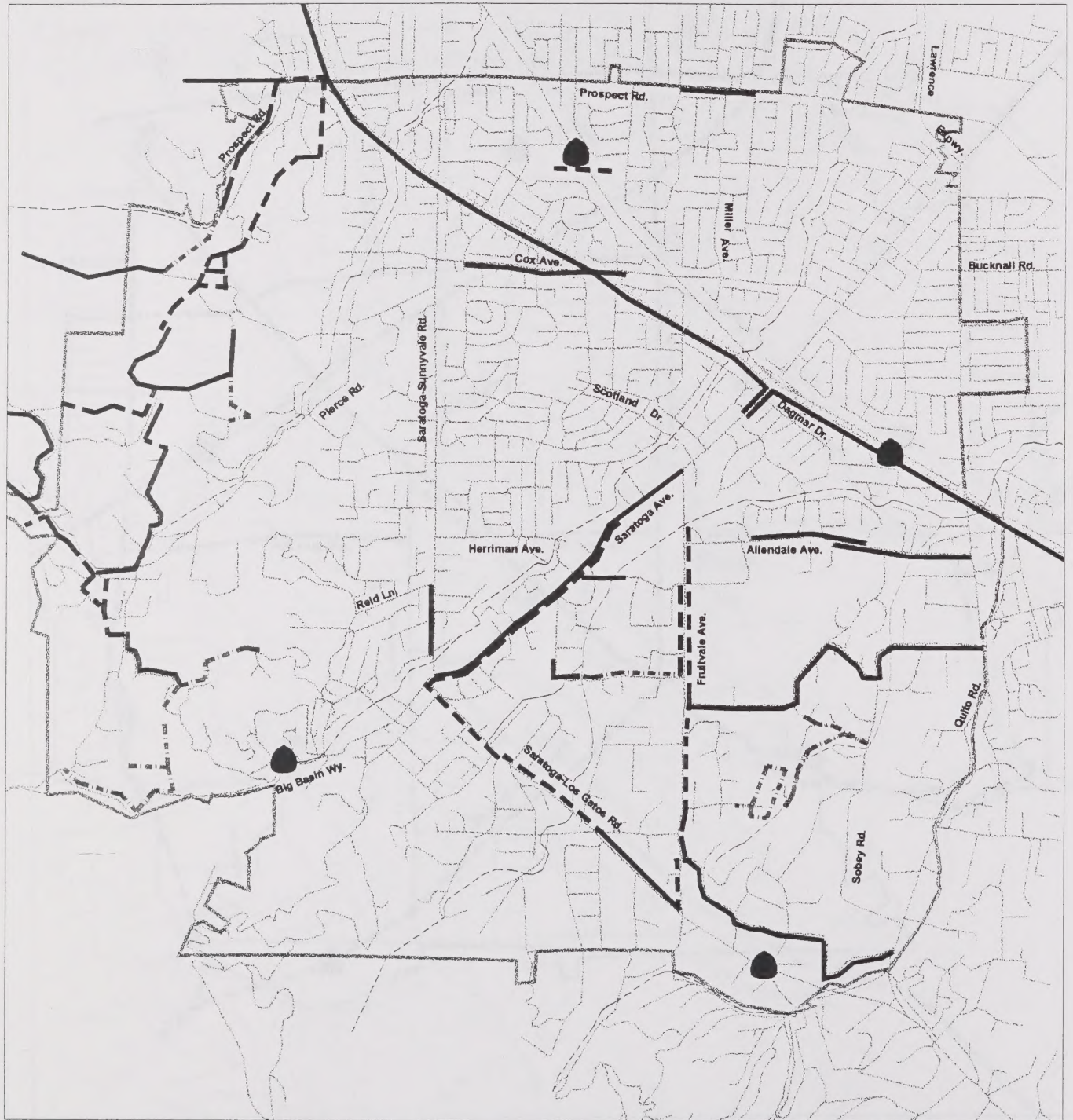
- . - . Bicycle Paths (Class I Facilities)
- . - . Bicycle Lanes (Class II Facilities)
- . - . Bicycle Routes (Class III Facilities)
- - - Expressway Segments (Bicycles Permitted)



Figure C-5

EXISTING AND PROPOSED BICYCLE FACILITIES





- Existing Trail Easement (Developed)
- · - Existing Trail Easement (Undeveloped)
- Proposed Trail or Sidewalk (Sidewalks on Major/Minor Arterials Only)



Figure C-6

EXISTING AND PROPOSED TRAILS, PEDESTRIAN PATHS



995-182-2

- CI.2.4 Accept Level of Service E or F operations at City-maintained signalized intersections after finding that no practical and feasible improvements can be implemented to mitigate the lower levels of service. A proposed development that exacerbates LOS E or F operations and causes a significant intersection impact should be considered for approval if it will provide a clear, overall benefit to the City (e.g., library expansion or relocation, new community center).
- CI.2.5 ~~Pursue development of additional freeway access to SR 85 at Prospect Road and/or Quito Road when traffic congestion at the existing Saratoga Avenue interchange is determined by the City to be excessive.~~
- CI.2.6 Ensure that new development or redevelopment projects provide adequate property dedication to accommodate future roadway improvements at key intersections and ~~near potential new interchange locations on SR 85~~ other problem areas.
- CI.2.7 ~~Improve~~ Manage traffic flow on major and minor arterial roadways to discourage through traffic in residential neighborhoods.
- CI.2.8 Align and design through collector streets to minimize adverse impacts on the character of residential neighborhoods through which they pass, while functioning efficiently to collect and distribute traffic.
- CI.2.9 ~~Encourage the use of loop roads and cul-de-sacs as a means to reduce through traffic and speeding in residential neighborhoods.~~
- CI.2.9a Design new local streets to reduce travel distance, promote alternative modes, and provide a more even distribution of traffic.
- CI.2.10 Establish the primary access for major traffic generators on arterial roadways and design overall access to minimize traffic intrusion to residential neighborhoods.
- CI.2.11 Strive to maintain traffic volumes and speeds on collector and local streets that are ~~consistent~~ compatible with the character of the adjacent land uses, ~~and the function of the street, and bicycle and pedestrian traffic.~~
- CI.2.12 ~~Improve existing streets to increase capacity where appropriate and protect existing street capacity when it may be affected by~~

new development or redevelopment projects.

CI.2.12 Protect the integrity of and improve existing hillside streets by planning future development according to existing street capacities.

CI.2.12a Focus future improvements on the most congested intersections to maintain an acceptable level of mobility for all modes of transportation.

CI.2.13 Require development projects to mitigate and reduce their respective traffic and parking impacts by implementing practical and feasible street improvements.

CI.2.14 ~~Provide a fair and equitable means for paying for future street improvements.~~

Implementation Measures

CI.2.15 Continue to use the Capital Improvement Program to program and implement needed improvements to the street system.

CI.2.15a Implement roadway and signal timing modifications to improve operations and enhance safety (e.g., lengthen turn pockets, adjust left-turn phases, widen lanes).

CI.2.16 Establish street and driveway accessibility requirements for all streets designated as a major or minor arterial roadway as shown on Figure C-2. Ensure that driveway or street access does not substantially impede arterial traffic flow as part of the City review process for individual development projects.

CI.2.17 Install coordinated signal systems on all major arterial roadways in the City to improve traffic flow as appropriate. Funding should be obtained from all available City, County, State and Federal funding sources, and developer contributions.

CI.2.18 Evaluate the need for upgrading or enhancing intersection control (e.g., signalization, stop signs) at existing intersections on arterial roadways and collector streets to improve overall access and circulation.

CI.2.19 Install traffic signals to serve existing and projected traffic demand, provide acceptable traffic operations issues, and enhance pedestrian safety.

- CI.2.20 Require a transportation analysis for all development projects resulting in 50 or more net new daily trips. The analysis shall identify potential impacts to intersection and roadway operations, project access, and alternative travel modes, and shall identify feasible improvements or project modifications to reduce or eliminate impacts. Impact significance should be consistent with the criteria maintained by the VTA. City staff should have the discretion to require focussed studies regarding access, sight distance, and other operational and safety issues.
- CI.2.21 Evaluate development proposals and design roadway improvements based on established Level of Service standards.
- CI.2.22 Require that roadway improvements identified as mitigation measures for development projects be in place prior to issuance of occupancy permits.
- CI.2.23 Require new development or redevelopment projects to dedicate property to accommodate roadway improvements at the following intersections: Saratoga-Sunnyvale Road/Prospect Road, Saratoga-Sunnyvale Road/Saratoga Avenue, and Saratoga Avenue/Cox Avenue. ~~Property dedication should also be provided near potential interchange locations on SR 85 at Prospect Road and Quito Road.~~
- CI.2.23a Identify potential capacity improvements and access modifications to maintain adequate circulation in the vicinity of the Civic Center, West Valley College, Redwood Middle School, the Public Library, st. Andrews School and Sacred Heart.
- CI.2.24 Consider paying for improvement costs to serve a development project, as appropriate, where the City's economic development interests may be served.
- CI.2.25 Develop and adopt a Neighborhood Traffic Management (NTM) Guidelines Plan to specifically include a process for identifying problem areas, and for evaluating, funding, and implementing traffic calming measures to mitigate reduce high traffic volumes and travel speeds on City streets.
- CI.2.25a Design local streets to carry low traffic volumes at low speeds and to function safely while minimizing the need for traffic control devices or enforcement. Physical features should include gentle

curves, changes of grade, narrow widths, short lengths, and T-intersections where feasible.

CI.2.25b Design streets to minimize impacts to topography, riparian habitats and wildlife corridors.

CI.2.26 Implement the action programs identified in the Hillside Specific Plan to provide adequate vehicular access including improvements identified for Pierce Road consistent with Policy 2.12. Where feasible, improvements will include widening of travel lanes, increasing vertical clearance, installing additional signs, and providing new pavement overlays to improve safety.

TRUCK TRANSPORTATION

Goal

CI. 3.0 Limit the intrusion of commercial truck traffic on streets within the City.

Policies

CI.3.1 Require trucks to only use the designated routes shown on Figure C-3 unless making a local delivery.

CI.3.2 Encourage or require deliveries to be made during off-peak periods (i.e., outside the morning and evening commute periods), especially in areas where intersections operate at LOS E or F during the peak periods.

Implementation Measures

CI.3.3 Continue to strictly enforce the truck route ordinance by citing violators.

CI.3.4 Require as part of the development agreement for new projects with regular truck deliveries that such deliveries be made outside the typical peak commute travel periods (e.g., 7:00 am to 9:00 am and 4:00 pm to 6:00 pm) as appropriate.

CI.3.5 Establish and maintain reserved commercial truck loading zones on public streets in appropriate areas such as the Village. Time limits for designated loading areas may be established to allow public on-street parking in loading zones at other times.

CI.3.6 Require new or redevelopment projects to provide on-site truck

loading areas except for areas such as the Village with small commercial lots. Enforcement will be provided by the Sheriff's Department similar to other on-street parking areas in the City.

TRANSIT

Goal

CI.4.0 Promote local and regional transit as a viable alternative to automobile travel for destinations within and outside the City.

CI.4.0a ~~Increase~~ **Promote** the use of alternative modes of transportation by improving the capacity, safety, accessibility, and convenience of existing and planned transit, bicycle and pedestrian systems.

Policies

CI.4.1 Coordinate with the Valley Transportation Authority to increase service range and frequency within the City as appropriate. Existing service is illustrated on Figure C-4.

CI.4.2 Install transit improvements to improve service, increase safety, and maintain traffic flow on streets serving as transit routes.

CI.4.3 Encourage the public school districts, private schools, recreation groups or other operators to develop a local bus system and to expand ride-sharing activities that will help to reduce school-generated vehicle traffic in neighborhoods and on City streets.

CI.4.4 ~~Pursue development~~ Investigate the feasibility of a local shuttle service within Saratoga to reduce local traffic volumes on City streets and overall parking demand. The feasibility study shall identify potential routes and funding sources.

Implementation Measures

CI.4.5 Require development projects to dedicate right-of-way for purposes of constructing bus turnouts and/or bus shelter pads on major and minor arterial roadways as appropriate.

CI.4.5a Provide seating and shaded waiting areas at transit stops, with stop locations near entrances of buildings to encourage ridership.

CI.4.6 Recommend to the Valley Transportation Authority specific streets (e.g., Cox Avenue) to be included on new or modified

~~routes and potential locations for bus shelter installations to encourage ridership.~~

- CI.4.7 ~~Provide direct pedestrian and bicycle facility connections to bus stops and transit centers~~ Improve the links of local transportation systems and alternatives such as bicycling and walking with private and public regional transit such as bus transit, light rail, and CalTrain. Bicycle and pedestrian improvements should be funded as Capital Improvement Program projects or through private development projects to further encourage the use of bus transit.
- CI.4.7a Provide information to the public on available alternative transportation choices and routes.
- CI.4.8 Encourage local businesses to provide employees with transit passes or other financial incentives to use transit to commute to and from the workplace.
- CI.4.9 Recommend potential stop locations for local school bus service and provide minor street and landscaping improvements as appropriate.
- CI.4.10 Commission a feasibility study of local shuttle service within Saratoga. Funding for the study should be obtained from federal and state grants/sources and private development projects.

BICYCLE, PEDESTRIAN AND EQUESTRIAN FACILITIES

Goals

- CI. 5.0a Integrate facilities for safe bicycling, walking, and horseback riding into the overall transportation system.
- CI.5.0b Encourage equestrian and pedestrian trails and pathways pursuant to the Parks and Trails Master Plan along roadways in areas where safety and aesthetics permit.

Policies

- CI.5.1 Develop and maintain a comprehensive and integrated system of bikeways that promote bicycle riding for commuting and recreation.
- CI.5.2 Integrate the City of Saratoga bikeways system with the bikeways

system of adjacent communities, where economically feasible.

- CI.5.3 Pursue the development of a new multi-use path along the Union Pacific Railroad alignment through the City of Saratoga that will link the Stevens Creek Recreational Trail in Cupertino with the Los Gatos Creek Trail in Los Gatos.
- CI.5.4 Pursue other potential rights-of-way such as Santa Clara Valley Water District and utility easements for bicycle, pedestrian, and/or equestrian trail development.
- CI.5.5 Assure implementation of the City's trails system by requiring trail dedication, construction, and a method of trail maintenance pursuant to the Parks and Trails Master Plan as part of the subdivision or site approval process.
- CI.5.6 Provide safe and direct pedestrian routes and bikeways between and through residential areas linking transit centers and important community centers such as the Village.
- CI.5.7 Improve pedestrian and bicycle access to all public and private schools to enhance safety.
- CI.5.8 Provide trails, sidewalks or separated pathways along all arterial streets and along some collector streets in areas where needed to provide safe pedestrian access to schools.
- CI.5.9 ~~Encourage~~ Require adherence to the trails policies noted in the both the Parks and Trails Master Plan and the Hillside Specific Plan.
- CI.5.10 Develop a set of practical and realistic transportation demand management (TDM) measures that can be used by employers in the City to reduce the number of single-occupant vehicle trips. These measures would encourage ride-sharing and transit alternatives.

Implementation Measures

- CI.5.11 Update and adopt the Bikeways Master Plan to include goals and objectives, a detailed list and map of improvements, a signage program, detailed standards, and an implementation program. The Bikeways Master Plan should include the proposed facilities shown on Figure C-5.

- CI.5.12 Upgrade existing bikeways and designate new facilities where they can be accommodated according to current Valley Transportation Authority (VTA) technical guidelines (prior to adoption of City standards in the Bikeways Master Plan). For example, travel lanes on Fruitvale Avenue north of Burgundy Way should be restriped to provide bicycle lanes with 5-foot minimum widths or pathways.
- CI.5.13 Coordinate with the school districts and other entities to develop "Suggested Route to School Plans" for all public and private schools in the City. Plans ~~should~~ shall identify all pedestrian and bicycle facilities, and traffic control devices for residents to determine the most appropriate travel route. The plans shall also identify existing easements for sidewalks.
- CI.5.14 Prohibit parking in designated bicycle lanes on all streets unless adequate width is provided according to VTA guidelines or City standards.
- CI.5.15 Require the provision of secure bicycle parking as part of all future development projects that include multi-family residential, commercial, industrial, office, and institutional uses.
- CI.5.15a Develop a plan to review and identify additional bicycle parking locations in the Village area.
- CI.5.16 Require new development projects and redevelopment projects to dedicate right-of-way and/or provide improvements to accommodate bicycle lanes on streets identified on Figure C-5.
- CI.5.16a Require new cul-de-sac streets to accommodate bicycle and pedestrian access between residential areas, public uses, and community areas.
- CI.5.17 Encourage non-residential development projects to include amenities such as showers and lockers for employees to further encourage bicycling as an alternative to automobile travel.
- CI.5.17a Increase priority of pedestrian safety projects (i.e., pedestrian street crossings, sidewalks or pathways) as part of the Capital Improvement Program.
- CI.5.18 Make bikeway improvements a funding priority by: 1) continuing to consider financing bikeway design and construction as part of the City's annual construction and improvement fund; 2)

incorporating bikeway improvements as part of the Capital Improvement Program and pavement management efforts; and 3) aggressively pursuing regional funding and other Federal and State sources for new bikeways.

- CI.5.19 Update the Parks and Trails Master Plan to maintain and expand the Citywide pedestrian path system. The plan should include the proposed trails shown on Figure C-6.
- CI.5.20 Prohibit motorized vehicular traffic on trails, pathways, parks and dedicated open space areas except for maintenance and emergency purposes.
- CI.5.21 Include new sidewalk or path construction in the Capital Improvement Program, or as part of any new development, to close gaps in pedestrian facilities on the following arterial roadways: Saratoga-Sunnyvale Road, Saratoga Avenue, Prospect Road, and Cox Avenue (see Figure C-6).
- CI.5.21a Include new sidewalk or path construction in the Capital Improvement Program, or as part of any new development or redevelopment, to close gaps on local and collector streets near schools.
- CI.5.22 Review the need to install sidewalks and crosswalks on all City streets within one-half mile of all public schools.
- CI.5.23 Review the present equestrian zones and assess their consistency with the trails and pathways plan of the circulation element.

AESTHETIC QUALITIES AND HERITAGE LANES

Goals

- CI.6.0a Protect the aesthetic, historic and remaining rural qualities of Saratoga through street design and landscaping.
- CI.6.0b Strive for aesthetically pleasing views from all roads in Saratoga and the Sphere of Influence.
- CI.6.0c Encourage the preservation of the width and appearance of those roads designated as heritage resources by the City.

Policies

- CI.6.1a Identify areas of critical need for beautification and coordinate plans with revitalization or anticipated development of areas such as City gateways.
- CI.6.1 Adhere to minimum City street standards based on location, terrain, character of areas and the anticipated function of the roadway.
- CI.6.2 Permit variation of the conventional City street development standards, as described in the City's Subdivision Ordinance, in order to preserve environmentally sensitive roadside features where traffic safety will permit such variations.
- CI.6.3 Identify the function of a street in advance of construction, and apply design criteria to minimize disruption to the area caused by through or heavy vehicle traffic.
- CI.6.4 Encourage the planting of trees and plan the development of landscaped medians along major arterial roadways.
- CI.6.5 Enforce ordinances to prevent the use of non-conforming roadside signs on all roads and highways within the City, whether erected by private individuals or business enterprises.
- CI.6.6 Require increased setbacks of up to 100 feet for structures, walls or fences to be located on lots adjacent to officially designated scenic highways where it is determined by the City that such increased setbacks are necessary to preserve the scenic qualities of the highway.
- CI.6.7 Require increased setbacks and landscaping for commercial and multi-family residential structures on corner lots adjacent to arterial streets, as required, to reduce the visual impact of such structures and to enhance the appearance of important intersections where it is determined by the City that such increased setbacks are necessary to preserve the scenic qualities of the highway.
- CI.6.8 Approve designs for new hillside streets that maximize the use of natural terrain for roadbed construction and minimize "cuts and fills."

TABLE 4
Year 2025 Intersection Levels of Service¹
(Assumes No New Roadway Capacity Improvements)

Intersection	Traffic Control	Peak Hour	Delay ²	LOS ³
#1 Saratoga-Sunnyvale Rd./Prospect Rd.	Signal	AM	77.0	F
		PM	59.1	E-
#2 Miller Ave./Prospect Rd.	Signal	AM	25.1	D+
		PM	29.3	D
#3 Saratoga-Sunnyvale Ave./Cox Ave.	Signal	AM	17.6	C
		PM	30.4	D
#4 Saratoga Ave./Cox Ave.	Signal	AM	79.5	F
		PM	151.5	F
#5 Quito Rd./Cox Ave.	Two-Way Stop	AM	4.4	F
		PM	79.9	F
#6 Quito Rd./McCoy Ave.	Two-Way Stop	AM	6.3	F
		PM	3.2	F
#7 Saratoga Ave./NB SR-85	Signal	AM	17.4	C
		PM	22.2	C
#8 Saratoga Ave./SB SR-85	Signal	AM	18.7	C
		PM	18.1	C
#9 Saratoga Ave./Dagmar Dr.	Signal	AM	17.4	C
		PM	32.1	D
#10 Saratoga Ave./Scotland Dr.	Signal	AM	18.1	C
		PM	37.6	D-
#11 Saratoga Ave./Fruitvale Ave.	Signal	AM	46.5	E
		PM	23.2	C-
#12 Fruitvale Ave./Allendale Ave.	Signal	AM	21.7	C
		PM	18.3	C
#13 Quito Rd./Allendale Ave.	Signal	AM	17.6	C
		PM	13.1	B-
#14 Quito Rd./Pollard Rd. ⁴	Signal	AM	16.2	C+
		PM	18.9	C
#15 Saratoga-Sunnyvale Rd./Saratoga Ave.	Signal	AM	27.6	D+
		PM	194.0	F
#16 Fruitvale Ave./Saratoga-Los Gatos Rd.	Signal	AM	25.4	D+
		PM	12.1	B

Notes: ¹ Operations based on adjusted Year 2025 forecasts.
² Average stopped delay per vehicle in seconds for signalized intersections and average total delay per vehicle in seconds for unsignalized intersections. Level of service at unsignalized intersections represents worst-case movement or approach.
³ LOS = Level of service. Calculations performed using TRAFFIX program.
⁴ Assumes overlap on westbound right-turn movement.

As shown in Table 4, six of the 16 study intersections are projected to operate at an unacceptable level (LOS E or F) during one or more peak hours under 2025 conditions. These locations include:

- Saratoga-Sunnyvale Road/Prospect Road (AM and PM peak hour)
- Saratoga Avenue/Cox Avenue (AM and PM peak hour)

- Quito Road/Cox Avenue (AM and PM peak hour)
- Quito Road/McCoy Avenue (AM and PM peak hour)
- Saratoga Avenue/Fruitvale Avenue (AM peak hour)
- Saratoga Sunnyvale Road (SR 9)/Saratoga Avenue (PM peak hour)

In addition, the two intersections at the SR 85/Saratoga Avenue interchange are expected to operate at unacceptable levels during both peak hours even though the results in Table 4 indicate that these locations are projected to operate at LOS C. The level of service analysis methodology does not account for ramp metering at the on-ramps, which adds substantial congestion at peak times (6:00 am to 9:00 am northbound and 3:00 pm to 7:00 pm southbound). With increased traffic on SR 85 in the future, both on-ramps will likely be metered during both peak periods. Installation of queue loops at the ends of the on-ramps can help to control the traffic signals at the intersections. By extending the red phase(s) for left-turns onto the ramp, vehicles are less likely to block the intersection.

Based on the substantially worse operations at several of the study locations, a review of the unadjusted model forecasts was completed to verify the intersection analysis. This review showed that the model is assigning a substantial volume increase on Big Basin Way (SR 9) west of the City, especially during the PM peak hour. This diversion is likely caused by congestion on southbound SR 85 towards SR 17. Since SR 9 is a parallel roadway to SR 17, Saratoga-Sunnyvale Road and Big Basin Way are expected to be natural diversion routes for traffic destined for the Santa Cruz Mountains and other areas south of Santa Clara Valley.

Potential Roadway Improvements

Improvements to provide acceptable operations (i.e., LOS D or better) in 2025 were identified for each location. A brief description of each is presented below. Potential right-of-way and construction issues associated with these improvements are also identified.

Intersection Improvements

Saratoga-Sunnyvale Road/Prospect Road

To provide acceptable operations during both peak hours, Saratoga-Sunnyvale Road would have to be widened to accommodate three through lanes in each direction at the intersection. To be truly effective, these lanes would have to extend at least 500 feet beyond the intersection before any taper or lane drops. This improvement would require right-of-way acquisition and a wider pavement cross-section. Any improvements at this intersection will require coordination with the Cities of San Jose and Cupertino.

Saratoga Avenue/Cox Avenue

The overall increase in traffic at this intersection plus the current split phase signal operation on Cox Avenue contributes to degradation of operations at this intersection. Split phasing (i.e., where traffic on each opposing approach gets a separate phase) is less efficient than

protected phasing, where the opposing left-turns and through movements can move simultaneously. Split phasing is required because of the limited right-of-way. Forecasts at this intersection are considered conservative because of the model network configuration.

Improvements to provide acceptable operations at this intersection would include the addition of turn lanes on the Cox Avenue approaches and modification of the signal to provide protected left-turns on Cox Avenue. These modifications would improve both existing and future conditions. Additional through capacity on Saratoga Avenue would improve operations, but would not provide LOS D operations by itself in 2025. Given the right-of-way constraints at this intersection (especially on the west leg), the addition of turn lanes on Cox Avenue is not considered feasible until adjacent properties redevelop.

Quito Road/Cox Avenue and Quito Road/McCoy Avenue

The projected increases in traffic on Quito Road will substantially reduce the number of available gaps or spaces between through vehicles. Additional turn lanes on the side street approaches (Cox Avenue and McCoy Avenue) would have a negligible effect on operations. Signalization of these intersections would provide LOS B operations at both of these intersections in 2025.

Saratoga Avenue/Fruitvale Avenue

The addition of a second left-turn lane from northbound Fruitvale Avenue to Saratoga Avenue would provide acceptable operations in the AM peak hour under 2025 conditions. This improvement could be accommodated in the existing right-of-way on Saratoga Avenue, but could require some right-of-way on Fruitvale Avenue. A minor encroachment into the adjacent orchard may be needed to implement this improvement.

Saratoga-Sunnyvale Road/Saratoga Avenue-Big Basin Way (SR 9)

As noted previously, substantial increases in traffic on Saratoga-Sunnyvale Road and Big Basin Way are forecast by the traffic model. During the PM peak hour, the southbound right-turn volume from Saratoga-Sunnyvale Road to Big Basin Way is projected to be very high. To reduce delay, a separate southbound right-turn lane would have to be constructed and the signal phasing would have to be modified to provide overlap for the southbound right-turn lane. The addition of a turn lane would likely require right-of-way acquisition and pavement widening on the west side of Saratoga-Sunnyvale Road north of Big Basin Way. Improvements would have to be coordinated with Caltrans because of the SR 9 designation.

With the exception of several roadway segments, most of the roadway facilities are built out and additional travel lanes will not be added. To not preclude potential intersection improvements, the City should ensure that development and redevelopment projects in the immediate vicinity of the following intersections provide right-of-way dedication to accommodate the improvements described above:

- Saratoga-Sunnyvale Road/Prospect Road
- Saratoga Avenue/Cox Avenue
- Saratoga-Sunnyvale Road/Big Basin Way (SR 9)

Potential Impacts of New SR 85 Interchanges

As noted previously, the existing and projected operations at the SR 85/Saratoga Avenue are or are expected to be substantially worse than the results of the level of service calculations for each scenario. The better than expected LOS results occur because the intersection analysis method cannot accurately reflect the capacity-reducing effect of ramp metering on the northbound and southbound on-ramps during the peak commute periods. Although a more detailed analysis of future operations could be conducted using more complex analysis tools, the magnitude of the projected peak-hour volumes indicates that there will be substantial congestion at this interchange if no additional capacity improvements are implemented. Accordingly, the impact of providing additional ramp access to SR 85 within Saratoga was evaluated.

Based on the City's current roadway network, new interchanges could theoretically be constructed at three locations: Prospect Road, Cox Avenue, or Quito Road. The amount of traffic diverted to the ramps was estimated using the Countywide transportation planning model. While provision of additional ramps would reduce traffic at and near the Saratoga Avenue interchange, traffic congestion is expected to increase at intersections near any new interchange. Additional detailed studies would have to be conducted to fully evaluate the impacts of a new freeway interchange, and extensive public and environmental review would be required. Based on precedent set by approval of the Saratoga Avenue interchange, the addition of any new interchange would likely should require a Citywide vote for approval. The conceptual feasibility and localized impact of each interchange are described below.

Prospect Road

Freeway ramps at Prospect Road were analyzed as part of the original traffic studies completed for SR 85 prior to the 1994 opening. In fact, the freeway and adjacent soundwalls were constructed so that ramps could be added at this location.

The Caltrans standard for interchange spacing is approximately one mile to minimize potential weaving conflicts on the freeway mainline. Given the proximity of the De Anza Boulevard interchange to the west, only ramps to and from the south could be built without substantially modifying the mainline freeway segment. The southern Prospect Road ramps would be located approximately one mile from the northern Saratoga Avenue ramps and would therefore meet the Caltrans spacing standard.

New Prospect Road freeway ramps providing access to and from the south were added to the Countywide 2025 model network and forecasts were prepared for the weekday AM and PM peak hours. A comparison of these forecasts to the 2025 volumes with no ramp modifications showed that the Prospect Road ramps would serve approximately 400 vehicles

each in the AM peak hour. During the PM peak hour, the southbound on-ramp is projected to serve approximately 400 vehicles, while the off-ramp volume is forecast to be 750 vehicles. The reduction in volume at the corresponding Saratoga Avenue interchange ramps is forecast to be very low (i.e., less than 100 vehicles). These results indicate that there ~~is a~~ will be substantial volume of future traffic on arterial streets that needs to access the freeway but cannot because of congestion at other interchanges. Thus, the Prospect Road ramps are not expected to provide a significant benefit for the Saratoga Avenue interchange based on 2025 traffic forecasts. However, they will provide ~~better~~ additional freeway access and reduce traffic on nearby arterial streets.

Cox Avenue

The Cox Avenue overcrossing is located only approximately 1,800 feet from the point where the northern Saratoga Avenue ramps connect to the freeway mainline segment. Thus, ramps to and from the south at Cox Avenue would not meet the Caltrans interchange spacing standard. In addition, the SR 85 freeway is depressed below grade, and the adjacent houses are located relatively close to the overcrossing. To construct ramps, substantial right-of-way acquisition would likely be required. Based on these factors, City staff and the traffic consultant concluded that new ramps connecting Cox Avenue to SR 85 were not feasible, and no traffic evaluation was completed.

Quito Road

The Saratoga City Council extensively reviewed the potential impacts of an interchange at Quito Road during the planning phase for SR 85, and also held extensive discussions with the City of Campbell. Based on these efforts, the City elected not to pursue freeway access at this location.

Similar to Cox Avenue, the Quito Road overcrossing is located approximately 3,100 feet from the Saratoga Avenue interchange and is too close to permit ramps to and from the north. However, ramps to and from the south would be over one mile from the ramps at Winchester Boulevard and would meet the Caltrans spacing standard. Potential construction issues for freeway ramps at this location include the close proximity of the Union Pacific railroad, the location of riparian corridors (Vasona and San Tomas Aquinas Creeks), and the proximity of the existing traffic signal at Westmont Avenue.

Year 2025 AM and PM peak hour forecasts were generated using the Countywide model assuming new SR 85 freeway ramps to and from the south were constructed at Quito Road. No ramps were assumed at Prospect Road. The Quito Road ramps themselves are forecast to serve between 430 and 825 vehicles depending on the peak hour. A comparison of forecasts showed that the Quito Road ramps would reduce the volume on the northbound off-ramp at Saratoga Avenue interchange by approximately 450 vehicles in the AM peak hour and 275 vehicles in the PM peak hour. The reductions in peak hour traffic for the on-ramp to southbound SR 85 are forecast to be less than 100 vehicles. Therefore, the Quito Road ramps

appear to provide a substantially greater benefit at the Saratoga Avenue interchange as compared to the Prospect Road ramps.

In general, the increase in traffic on Saratoga streets will primarily consist of through traffic since the City is essentially built out. However, additional capacity will be required to maintain acceptable traffic operations or to minimize delays to the extent possible at locations with excessive congestion. To maximize the opportunity for future roadway capacity and freeway access, the City should establish a policy to limit any development that could encroach on future interchange footprints at both the Prospect Road and Quito Road overcrossings. As indicated above, more detailed analyses will be required to determine the specific environmental and traffic impacts of new interchange ramps.

Roadway Functional Classifications

Roadway functional classification is used to determine appropriate traffic levels for streets and highways, as well as the appropriate fronting land uses. In addition, roadway classifications are used to determine the applicability of traffic calming devices (see Neighborhood Traffic Management section below). With the potential for increased through traffic in neighborhoods, the City's functional classification system based on the FHWA maps needs to be revised. The Circulation Element will include a map showing the new classifications for each roadway.

Transportation Impact Analysis (TIA) Reports

The City requires most new development and redevelopment projects to prepare an impact analysis to evaluate the effect of these projects on the current transportation system. Projects that generate a negligible number of net new trips are typically exempt from this requirement. The TIA process allows the City to request specific improvements from private developers based on the relative impact of the project. Each TIA is also reviewed by the VTA to determine the projected transportation impacts of the proposed land use. To provide additional guidance for developers, the City should set a minimum trip threshold for a TIA exemption, but should maintain the discretion to require focussed studies of operational and safety issues.

The analysis of transportation impacts should be consistent with the criteria maintained by the VTA, the regional planning agency for Santa Clara County. Impact criteria for freeways, intersections, and alternative modes are published in the VTA's guidelines for impact analyses. For developments that cause significant and unavoidable impacts, the City should use its discretionary approval process to determine whether the project would provide a clear and overall benefit to Saratoga.

Truck Traffic

As noted previously, truck traffic ~~does not appear~~ is not considered to be an existing problem in the City of Saratoga. Even with increased through traffic on City streets, the number of

trucks without a destination or origin in the City traffic is not expected to increase substantially. Additional development within Saratoga is expected to be limited given the fact that the City is mostly built out. Low volumes of truck traffic will be generated by the construction of new single-family homes or the limited redevelopment of other areas. This traffic is expected to have a negligible effect on overall Citywide circulation.

SR 9 west of Saratoga is not conducive to truck travel because of its design, and large trucks are not permitted on SR 85. Article 9-40 of the City's Ordinance currently identifies designated routes for trucks that do not make local deliveries or pick-ups. Truck routes should include City streets that do not have front-on housing, are not designated as a heritage lane, or have design features that do not favor the movement of large trucks (e.g., sharp curves, narrow travel lanes). Although Saratoga Avenue between Fruitvale Avenue and SR 9 would not be included based on some of the aforementioned criteria, there are no alternative routes that are considered feasible (i.e., because of the adjacent neighborhoods, narrower lane widths, overhead landscaping, and circuitous path). Given their connectivity between communities, the State Highway segments are ~~assumed~~ considered to be designated truck routes.

Neighborhood Traffic Management

Changes in traffic patterns due to the opening of SR 85 in 1994 and overall increases in traffic within the City have caused some through traffic to divert to residential collector and local streets. The recent increase in the number of citizen complaints regarding the volume and speed of traffic on these facilities has prompted the City to better define its approach to neighborhood traffic management (NTM). A focused study is currently underway to determine if traffic calming devices are necessary within the Prides Crossing neighborhood, which is generally bounded by SR 85 on the west, Prospect Road on the north, Saratoga Creek on the east, and Cox Avenue to the south.

The City of Saratoga should officially adopt its own set of NTM guidelines to specifically define a process for requesting, funding and implementing new or modified traffic control devices. Specific guidelines help to expedite the review of citizen complaints and clearly present the City's approach to traffic calming. An example set of guidelines is included in the technical appendix. These guidelines are based on the guidelines adopted by the City of San Luis Obispo in June 1998 and describe a variety of potential traffic calming measures and how they should be applied. The NTM process also includes a very specific formula for funding that would have to be reviewed in detail by City of Saratoga staff.

Improvements to Other Travel Modes

Similar to the rest of the Bay Area, increasing traffic volumes and the limited opportunities for expanding roadway capacity in Saratoga will increase the demand on alternative travel modes. Potential improvements to each mode are discussed below.

Transit

The Valley Transportation Authority (VTA) controls fixed route bus service in the City of Saratoga. In addition to making service changes to accommodate near-term demand, the VTA does long-range planning to determine future service needs. The City of Saratoga can help improve transit service by requiring new development and redevelopment projects to install bus turnouts, sidewalks, and other transit amenities. In addition, encouraging higher density development in the vicinity of key transit stops such as West Valley College will further expand travel opportunities for residents and employers in the City.

Input from community members, as well as parents of school students, indicates that residents are also interested in improved local transit service within Saratoga. A local shuttle system would allow residents to travel to key destinations (i.e., shopping centers, schools, commercial areas) without increasing traffic. School traffic is a major generator, especially during the AM peak period. The City should actively pursue a study to assess the feasibility of such a system in concert with the business community and school districts.

Access to the VTA's light rail system will be provided at the future Vasona Junction station just west of Winchester Boulevard and north of SR 85 in the Town of Los Gatos. However, this facility is part of Phase III of the planned Vasona Corridor extension from downtown San Jose and is not expected to be in service before 2005. Currently planned light rail service is expected to have a negligible impact on transit service in Saratoga given the distance between the proposed station and the city, and the fact that many patrons would drive to the new station. A greater impact would occur with provision of light rail service in the SR 85 corridor through the City. The freeway was constructed to accommodate light rail tracks in the center median as part of a future extension.

Bicycle Facilities

The City's *Proposed Bicycle Network* (June 1995) identified a series of new bicycle facilities to complete the Citywide bicycle system. The new facilities in this document included both bicycle lanes and bicycle route designations. Three roadway cross-sections were included for specific street segments that meet current Caltrans standards and Valley Transportation Authority guidelines. However, no detailed design standards for all Class I (paths), Class II (lanes), or Class III (routes) facilities were described or adopted. Lastly, many of the City's existing bicycle facilities do not include appropriate signage that identifies lanes or routes.

Field reviews conducted in 1999 showed that, in some cases, bicycle lanes proposed in 1995 could not be accommodated without substantial right-of-way acquisition, or elimination of on-street parking in areas with continuous front-on housing.

A revised set of proposed facilities was prepared based on previous published information and recent field data. The key new facilities include:

- *UPRR Multi-Use Path* – A multi-use path in the Union Pacific Railroad corridor that will ultimately link the City of Cupertino to the Town of Los Gatos.

- *Cox Avenue Route* (Paseo Presada to Quito Road) – Bike lanes were originally identified for this segment, but lanes would require right-of-way acquisition to maintain on-street parking on both sides, or the elimination of on-street parking. Thus, this segment is recommended for designation as a bike route.
- *Fruitvale Avenue Route* (Saratoga-Los Gatos Rd to Burgundy Way) – This segment is recommended as a bike route. Although an asphalt path is located on one side of this segment, the existing width does not meet current Caltrans or VTA standards for multi-use paths and would therefore be limited to pedestrian use only.
- *Allendale Avenue Route* (Quito Road to Vasona Creek) – Similar to the Cox Avenue segment, on-street parking would have to be eliminated or right-of-way would have to be acquired to accommodate bicycle lanes.
- *Allendale Avenue Lanes* (Fruitvale Avenue to Vasona Creek) – The width of this roadway segment could accommodate bicycle lanes by reducing the width of existing travel lanes.
- *Scotland Drive and Cumberland Drive Route* (Saratoga Avenue to Cox Avenue) – This route is recommended to provide an additional north-south bicycle facility until the UPRR multi-use path is constructed. This route also provides an alternate travel path for inexperienced bicyclists who want to avoid the SR 85/Saratoga Avenue interchange.
- *Miller Avenue Route* (Cox Avenue to Brookview Drive and Somerville Drive to Prospect Road) – The bicycle lanes between Brookview and Somerville Drives were originally installed to provide a safe connection for younger cyclists traveling between neighborhoods west of Miller Avenue and McAuliffe Elementary School on Titus Avenue. A bicycle route is recommended for these segments to provide a continuous facility between Cox Avenue and Prospect Road. Bicycle lanes would require the elimination of on-street parking. The recommended route will be reviewed as part of the Prides Crossing neighborhood traffic study currently underway.

To ensure consistent implementation of the proposed facilities, the City should formally adopt a set of design guidelines for bicycle facilities. The VTA has prepared a set of technical guidelines for bicycle facilities and services to be used by local agencies in Santa Clara County. All existing facilities should be upgraded to include appropriate signage and pavement markings and modified to meet minimum design standards based on these guidelines. For example, the travel lanes on Fruitvale Avenue between Saratoga Avenue and Burgundy Way should be re-striped to provide adequate bicycle lane width so that riders do not have to travel in the valley gutter. The City should prepare a Bicycle Master Plan (BMP) that includes all of the proposed facilities and design standards. A formal BMP document substantially improves the City's opportunities for obtaining State funds for bicycle improvements.

Pedestrian Facilities/Trails

As noted previously, most collector and local streets in Saratoga do not have sidewalks, which is in keeping with the rural planning principles maintained by the City for many years. On most minor streets, pedestrians are required to share the roadway with vehicles, which is not typically a problem since traffic volumes are relatively low and travel speeds are usually less than 30 miles per hour. However, a lack of sidewalks in the immediate vicinity of schools can be a problem during peak traffic demand in the morning and afternoon.

A review of all existing major and minor arterial roadways showed that several segments have gaps in sidewalks or separate pedestrian paths. These segments include portions of Prospect Road, Cox Avenue, Saratoga-Sunnyvale Road, Allendale Avenue, and Saratoga-Los Gatos Road (SR 9). While pedestrians sharing the roadway with vehicles can be accommodated on local streets, pedestrians should not enter the traveled way of roads where traffic volumes and travel speeds are substantially higher. These gaps should be closed to improve pedestrian travel and safety. Enhanced pedestrian access will provide an alternative to automobile travel and will improve access to available transit facilities and services.

The City completed a comprehensive study of multi-use and pedestrian trails as part of a 1991 Parks and Trails Master Plan update. The plan included existing trail easements (both developed and undeveloped) as well as the location of proposed trails. The current plan links the population centers in Saratoga to the great scenic and open space resources available in the Santa Cruz Mountains. Although a primary function of the trail system is to provide recreational opportunities, trail links to sidewalks and low volume streets will provide a travel alternative for other purposes including shopping, school, and employment trips. The City should ensure implementation of the proposed trail system.

Suggested Routes to Schools

Directly related to pedestrian and bicycle travel is the issue of students traveling between their home and school. Although students in Saratoga are permitted to attend any school within their district, the majority of students attend their neighborhood school. In most cities, the majority of students walk or bike to their local school. However, most local and collector streets do not include sidewalks except in the immediate vicinity of each school. Based on this information and recent studies at several area schools, many Saratoga students are driven to school for two reasons: 1) their residence is located beyond a reasonable walking distance, especially for students in the western and southern hills, and 2) parents perceive that the pedestrian and bicycle routes to school are dangerous because students must share the road with vehicular traffic.

Increased traffic caused by student drop-off and pick-up vehicle travel further reduces safety for those students that do walk or bike. With the help of ALTRANS, the Saratoga Union School District has made efforts to reduce the number of vehicles generated by each school by encouraging and coordinating carpools and providing alternative mode information to parents. These entities have also held workshops and education seminars on bicycle safety.

Although the school district has the most direct contact with parents and students, the City of Saratoga should work with the school district to ensure that students are provided with as much information as possible regarding safe travel to and from school. Thus, the City should work with the school district to expand the current education efforts and prepare *Suggested Route to School* maps for each campus, and a *Guidelines for Safe Walking and Bicycling* handbook. Each of these items is described briefly below.

Suggested Route to School maps include all bicycle and pedestrian-related facilities and traffic control devices including: crosswalks, traffic signals, stop signs, paved sidewalks, and school sign installations. An example map for a ¾-mile radius around Foothill Elementary School is included in the technical appendix. This type of map should be used by parents and students to choose the most appropriate route to school that maximizes the use of devices that control traffic and warn drivers of pedestrians. The example map is intended for informational purposes only and does not imply a guarantee of safety for any particular street or route.

A Guidelines for Safe Walking and Bicycling handbook is an informational pamphlet for parents and teachers to provide guidelines for safe pedestrian and bicycle travel (a sample booklet is included in the appendix). It provides text and illustrations to show the correct procedures for minimizing potential conflicts with vehicles and includes suggested activities that parents can do with their children. A section for parents with tips on selecting a suggested route to school is also included. This sample booklet should be reviewed by both the school district and City staff and included as part of future student education efforts. Similar to the sample route map, the sample handbook does not imply a guarantee of safety. Parental education and supervision is a key element of a child's approach to traveling on or near roadways.

The District should continue its education programs and should encourage students to walk and bicycle to school as appropriate. The City should continue to pursue opportunities to enhance pedestrian and bicycle facilities, especially in the vicinity of schools.

Potential Scenic Highways and Corridors

Several roadways in or near the Saratoga Sphere of Influence have the potential for protection under the State and County scenic highways programs. These facilities are described below. Local policies and programs to maintain scenic corridors within the City of Saratoga are also presented.

Eligible State Highways

Besides SR 9, the only other highway that is currently considered eligible for Scenic Highway designation is SR 35 from SR 9 (at Saratoga Gap) to the Santa Clara County-San Mateo County line. Since the majority of views from this segment are to the west and south, Santa Cruz County is ultimately responsible for developing a scenic highway program for this segment. In San Mateo County, SR 35 is an officially designated route.

The section of Saratoga-Sunnyvale Road designated as SR 85 (from the De Anza Boulevard interchange in Cupertino to Big Basin Way in Saratoga) is expected to be relinquished to the City of Saratoga and would likely have to be processed under the County's scenic highway program. However, this corridor requires substantial visual and aesthetic improvements before it could be considered by County and State scenic highway review committees.

Eligible County Roadways

Numerous corridors in the Saratoga Sphere of Influence could be considered under the County's Scenic Highways protective ordinance. The most likely candidate roadway segments are Mt. Eden Road between Pierce Road and Stevens Canyon Road (only a one-mile segment west of Pierce Road is in the City). The City should support designation of such facilities to increase the aesthetics of the surrounding area.

Local Measures to Maintain Scenic Roadways

Arterial roadways and collector and local streets are not eligible for the existing scenic highway protection programs. However, efforts to beautify these facilities contribute to the overall aesthetic appeal of the City. Several locations within the City have been identified as having poor visual quality areas because of extensive commercial development and/or limited landscaping. Key corridors that could be improved include portions of Saratoga Avenue, Quito Road, and Prospect Road. The gateway from Cupertino into Saratoga at the Saratoga-Sunnyvale Road/Prospect Road intersection is often cited by residents as an example of where landscaping and beautification is needed.

The City of Saratoga has numerous ordinances and procedures to require new development projects, redevelopment projects, and property/building modifications to contribute to the establishment and maintenance of scenic corridors. These measures include:

- Parcel re-zoning
- Minimum site frontage requirements
- Subdivision requirements for development projects to maintain topography
- Landscaping requirements between fences/walls and major roadways, and on dead-end streets
- Design review of most residential and commercial developments by the Planning Commission
- Permit requirements for tree removal
- Building structure height restrictions
- Requirements for underground utilities/wiring
- Special ordinances for hillside subdivisions to provide erosion control
- Establishment of scenic easements in hillside subdivisions
- Aesthetic/scenic policies in the Hillside Specific Plan

VI. DRAFT GOALS, POLICIES AND IMPLEMENTATION MEASURES

Based on the existing features of the transportation system in the City and the projected future travel demand, a set of updated goals, policies, and implementation measures was developed for the Circulation and Scenic Highway Element. This information has been modified by the Public Safety Commission and Planning Commission, and the City Council may make further revisions as appropriate.

Background

The existing low-density residential land use pattern combined with a limited amount of commercial support services, entertainment centers, and employment centers do not strongly support the need for a complex transit system. However, expanded transit service is needed to provide transportation opportunities for all residents and is an important alternative to automobile use. The use and expansion of other alternative modes including bicycling and walking is another key issue for providing a comprehensive Citywide transportation system.

The “backbone” of the City’s roadway network is a set of major and minor arterial roadways that provide the link between neighborhoods and the City’s commercial services, and also the regional freeway system. Local and residential collector streets represent the rural nature of Saratoga. The pattern and design of local streets help to shape the image and identity of neighborhoods, influence perceived safety, change communication between neighbors, increase the attractiveness of alternative modes. This Circulation Element was updated to further protect local neighborhoods and to set forth policies that will enhance travel throughout the City.

CIRCULATION AND SCENIC HIGHWAY ELEMENT (CI)

A circulation element consisting of the general location and extent of existing and proposed major thoroughfares transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

A scenic highway element for the development, establishment, and protection of scenic highways pursuant to the provisions of Article 2.5 commencing with Section 260 of Chapter 2 of Division 1 of the Streets and Highways Code.

OVERALL TRANSPORTATION SYSTEM

Goal

- CI.1.0 ~~Promote~~ Provide a balanced transportation system in Saratoga to give mobility to all segments of the community and to maintain the City’s rural character.

Policies

- CI.1.1 The City shall encourage and participate in the implementation of a variety of modes of transport to serve Saratoga.
- CI.1.2 ~~Coordinate local actions with regional agencies, and undertake active efforts to undertake transportation improvements.~~
Encourage development of inter-regionally based cooperation to support local and regional transportation solution and improvements.

STREET SYSTEM AND STANDARDS OF SERVICE

Goal

- CI.2.0 Facilitate the safe movement of vehicular traffic within and through the City, taking into consideration the environmental, historical, and residential integrity of the City to maximize benefits and minimize adverse impacts and costs.

- CI.2.0a For traffic management and street design, balance the efficiency of vehicular traffic with the safety and livability of residential areas.

Policies

- CI.2.1 Make efficient use of existing transportation facilities and strive to reduce the total number of vehicle miles traveled through the arrangement of land uses, improved alternative modes, and enhanced integration of various transportation systems.
- CI.2.2 Maintain and develop a City-wide street system that ~~provides adequate~~ manages vehicular access, but also provides for emergency access.
- CI.2.2a Adopt the proposed roadway classifications as shown on Figure C-2 and described in the Background Report.
- CI.2.3 Maintain a minimum Level of Service (LOS) D operations standard at all signalized street intersections that are under City jurisdiction. (Intersections and roadways included in the Santa Clara County Congestion Management Program are held to a LOS E standard).
- CI.2.3a Require public review of any development project or other proposal that causes an intersection to degrade by one or ~~more~~ levels of service (e.g. LOS A to B, LOS B to D).

San Jose Neighborhood Traffic Management Guidelines for the City of Norridge

The City of Norridge is committed to providing a safe and efficient transportation system for its residents. This document provides guidelines for the City of Norridge to implement traffic management measures in its neighborhoods. The guidelines are based on the City of Norridge's commitment to providing a safe and efficient transportation system for its residents. The guidelines are based on the City of Norridge's commitment to providing a safe and efficient transportation system for its residents. The guidelines are based on the City of Norridge's commitment to providing a safe and efficient transportation system for its residents.

TECHNICAL APPENDIX

The technical appendix provides detailed information on the traffic management measures that can be implemented in the City of Norridge. The appendix includes information on the following topics:

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Guidance Topics

The technical appendix provides detailed information on the traffic management measures that can be implemented in the City of Norridge. The appendix includes information on the following topics:

- 1. Roadway Design
- 2. Traffic Signs
- 3. Traffic Signals
- 4. Traffic Calming Measures
- 5. Pedestrian Safety
- 6. Bicycle Safety

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

REPORT OF THE
COMMISSION ON THE ORGANIZATION OF THE
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PRESENTED TO THE
FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES
AT THE MEETING OF THE DIVISION, MAY 1964

BY THE COMMISSION ON THE ORGANIZATION OF THE
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Sample Neighborhood Traffic Management Guidelines for the City of Saratoga

The guidelines presented below are based on the detailed Neighborhood Traffic Management (NTM) Guidelines adopted by the City of San Luis Obispo in June 1998. These guidelines are very detailed in terms of the process of implementing NTM measures. Other jurisdictions use a less formal process that can be simpler, but may also be more open to interpretation by residents and decision-makers. One advantage of these guidelines is the very specific funding mechanism for designing and installing physical roadway improvements. When the City of Saratoga prepares a formal set of guidelines, items such as the household cost allowance should be reviewed. In addition, those NTM measures that may be too expensive to implement and maintain should be identified. ***Important: These guidelines are for discussion purposes only and are not considered a formal City policy or part of the municipal code.***

Purpose

The community of Saratoga was officially incorporated in 1956. Because of the rural-based planning principles employed to maintain a high quality of life, the community has relied on the automobile as the primary form of transportation over the years. This reliance has begun to cause traffic conflicts in residential neighborhoods, especially with recent growth in the south Bay Area and the opening of a major freeway through the City in 1994. In recent years, concerns raised by individuals and neighborhood advocacy groups has highlighted the relationship between providing for automobile access throughout the community and maintaining the quality of life expected in residential areas.

The purpose of these Neighborhood Traffic Management Guidelines is to maintain and improve the quality of life in Saratoga's residential areas by reducing problems associated with motor vehicle traffic.

General Scope

As explained in the following sections of this document, Saratoga's NTM program addresses the following types of traffic problems in residential areas along Residential Local, Collector, and Arterial Streets.

- Speeding Traffic
- Too Much Traffic
- Other Disruptive Traffic Conditions
- Pedestrian-Bicycle Safety
- Sight-Distance Problems

- Truck Traffic
- Persistent Traffic Law Violations
- Management of Traffic at Intersections

Solutions to "normal safety problems" are addressed by the City's traffic management program and are paid for by the City. When there is a question about what constitutes a normal safety problem versus a NTM problem, the Director of Public Works will decide. Where disagreement continues, the Public safety Commission will resolve the issue as part of the process described in these guidelines.

Standards and Application

In Saratoga, some streets are designated as routes that carry traffic through a residential area, from one part of the City to another. These streets are called Arterials and are identified in the City's General Plan Circulation Element. Some sections of these arterials include front-on housing on one or both sides and are referred to as Residential Arterials.

The Circulation Element also identifies streets that are intended to provide access to and from residential areas. These streets are called Residential Collector or Residential Local streets and are typically fronted by housing and have two lanes for traffic plus parking on both sides.

To promote compatible traffic conditions within residential areas, the Circulation Element establishes the standards shown in the table below. The provisions of these NTM guidelines apply to Residential Local, Residential Collector, and Residential Arterial streets. Throughout this document, excessive speeds or excessive traffic volumes are defined as those levels that exceed the thresholds shown in the following table:

Volume and Speed Thresholds for Residential Streets		
Type of Street	Desired Maximum Volume in Vehicles Per Day (vpd)	Desired Maximum Speed ¹
Residential Arterial	No standard	35 mph
Residential Collector	3,000 vpd	25 mph
Residential Local	1,500 vpd	25 mph
Notes: 1 Desired maximum speed refers to the 85 th percentile speed (i.e., 85 percent of vehicles drive at or below this speed). These standards may be reduced in school zones or other special speed zones consistent with provisions of the California Vehicle Code (otherwise known as the prima facie speed limits).		

NTM Goals and Policies

By carrying out the provisions of these guidelines, the City of Saratoga hopes to:

SAMPLE
NEIGHBORHOOD TRAFFIC MANAGEMENT (NTM)
GUIDELINES
(Not officially adopted)

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861.

2. The second part is a report from the Secretary of the Treasury, dated January 1, 1861.

3. The third part is a report from the Secretary of the Interior, dated January 1, 1861.

4. The fourth part is a report from the Secretary of the Navy, dated January 1, 1861.

5. The fifth part is a report from the Secretary of the War, dated January 1, 1861.

6. The sixth part is a report from the Secretary of the State, dated January 1, 1861.

7. The seventh part is a report from the Secretary of the Army, dated January 1, 1861.

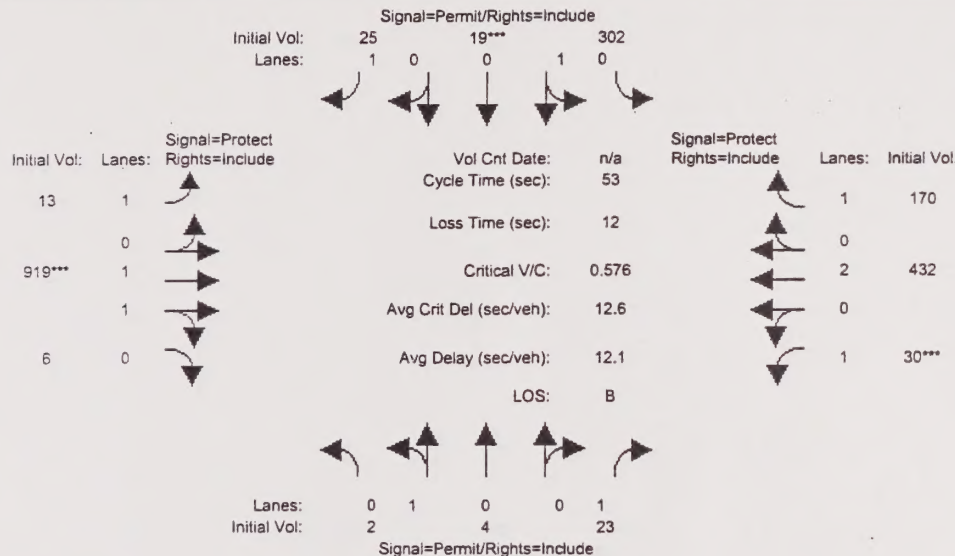
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7. The seventh part is a report from the Secretary of the Army, dated January 1, 1861.	8. The eighth part is a report from the Secretary of the Navy, dated January 1, 1861.

8. The eighth part is a report from the Secretary of the Navy, dated January 1, 1861.

9. The ninth part is a report from the Secretary of the War, dated January 1, 1861.

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

Intersection #16: Fruitvale Ave. Saratoga Los Gatos Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	2	4	23	302	19	25	13	919	6	30	432	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	4	23	302	19	25	13	919	6	30	432	170
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	4	23	302	19	25	13	919	6	30	432	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	4	23	302	19	25	13	919	6	30	432	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	4	23	302	19	25	13	919	6	30	432	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	4	23	302	19	25	13	919	6	30	432	170
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	0.33	0.67	1.00	0.94	0.06	1.00	1.00	1.99	0.01	1.00	2.00	1.00
Final Sat.:	600	1200	1750	1693	107	1750	1750	3676	24	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.01	0.18	0.18	0.01	0.01	0.25	0.25	0.02	0.11	0.10
Crit Moves:				****			****			****		
Green Time:	14.2	14.2	14.2	14.2	14.2	14.2	11.1	19.8	19.8	7.0	15.8	15.8
Volume/Cap:	0.01	0.01	0.05	0.67	0.67	0.05	0.04	0.67	0.67	0.13	0.38	0.33
Delay/Veh:	10.9	10.9	11.0	15.6	15.6	11.0	12.7	11.4	11.4	15.5	11.3	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.9	10.9	11.0	15.6	15.6	11.0	12.7	11.4	11.4	15.5	11.3	11.1
DesignQueue:	0	0	0	7	0	1	0	18	0	1	9	4

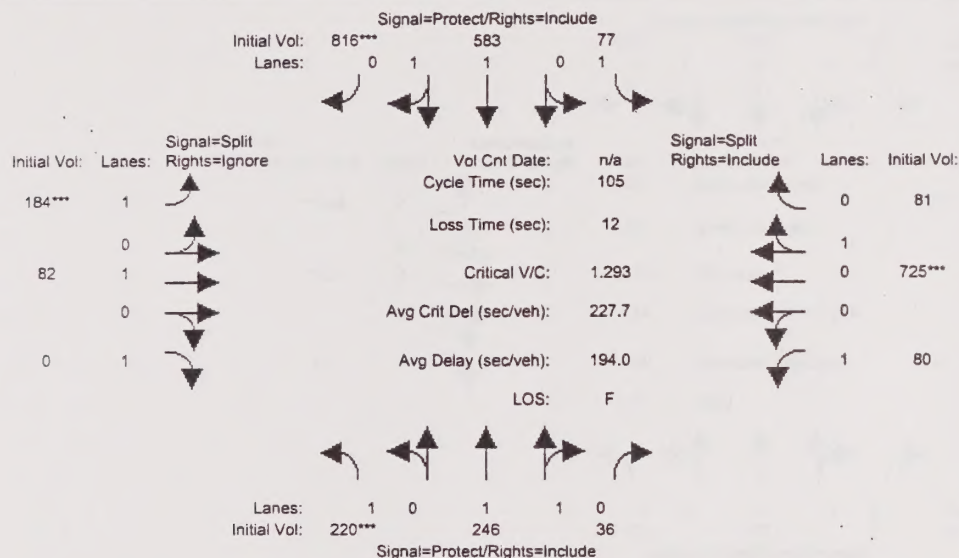
Name		Age		Sex		Status	
John Doe		35		Male		Single	
Jane Smith		28		Female		Married	
Bob Johnson		42		Male		Divorced	
Alice Brown		31		Female		Single	
Charlie White		25		Male		Single	
Diana Green		38		Female		Married	
Eve Black		22		Female		Single	
Frank Gray		45		Male		Married	
Grace Hall		33		Female		Single	
Henry King		27		Male		Single	
Ivy Lee		36		Female		Married	
Jack Miller		29		Male		Single	
Karen Wilson		41		Female		Married	
Leo Taylor		24		Male		Single	
Mia Adams		37		Female		Married	
Noah Baker		26		Male		Single	
Olivia Clark		39		Female		Married	
Peter Evans		23		Male		Single	
Quinn Foster		43		Female		Married	
Samuel Gibson		21		Male		Single	
Tina Harris		34		Female		Married	
Uma Ivers		28		Female		Single	
Victor Jones		44		Male		Married	
Wendy King		20		Female		Single	
Xavier Lee		32		Male		Married	
Yara Miller		25		Female		Single	
Zoe Wilson		35		Female		Married	

Name		Age		Sex		Status	
Adam Baker		27		Male		Single	
Bella Clark		31		Female		Married	
Caleb Evans		24		Male		Single	
Diana Foster		38		Female		Married	
Ethan Gibson		22		Male		Single	
Fiona Harris		33		Female		Married	
Gavin Ivers		26		Male		Single	
Hannah King		36		Female		Married	
Ian Lee		29		Male		Single	
Julia Miller		40		Female		Married	
Kevin Wilson		23		Male		Single	
Liam Adams		37		Male		Married	
Mia Baker		25		Female		Single	
Nora Clark		34		Female		Married	
Oscar Evans		21		Male		Single	
Pamela Foster		39		Female		Married	
Quinn Gibson		28		Male		Single	
Rachel Harris		32		Female		Married	
Samuel Ivers		24		Male		Single	
Tina King		35		Female		Married	
Uma Lee		27		Female		Single	
Victor Miller		41		Male		Married	
Wendy Wilson		20		Female		Single	
Xavier Adams		32		Male		Married	
Yara Baker		25		Female		Single	
Zoe Clark		35		Female		Married	

Name		Age		Sex		Status	
Aaron Evans		27		Male		Single	
Bella Foster		31		Female		Married	
Caleb Gibson		24		Male		Single	
Diana Harris		38		Female		Married	
Ethan Ivers		22		Male		Single	
Fiona King		33		Female		Married	
Gavin Lee		26		Male		Single	
Hannah Miller		36		Female		Married	
Ian Wilson		29		Male		Single	
Julia Adams		40		Female		Married	
Kevin Baker		23		Male		Single	
Liam Clark		37		Male		Married	
Mia Evans		25		Female		Single	
Nora Foster		34		Female		Married	
Oscar Gibson		21		Male		Single	
Pamela Harris		39		Female		Married	
Quinn Ivers		28		Male		Single	
Rachel King		32		Female		Married	
Samuel Lee		24		Male		Single	
Tina Miller		35		Female		Married	
Uma Wilson		27		Female		Single	
Victor Adams		41		Male		Married	
Wendy Baker		20		Female		Single	
Xavier Clark		32		Male		Married	
Yara Evans		25		Female		Single	
Zoe Foster		35		Female		Married	

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Intersection #15: Saratoga Sunnyvale Rd. Saratoga Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	220	246	36	77	583	816	184	82	139	80	725	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Initial Bse:	220	246	36	77	583	816	184	82	0	80	725	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	220	246	36	77	583	816	184	82	0	80	725	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	220	246	36	77	583	816	184	82	0	80	725	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	246	36	77	583	816	184	82	0	80	725	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	220	246	36	77	583	816	184	82	0	80	725	81

Saturation Flow Module:

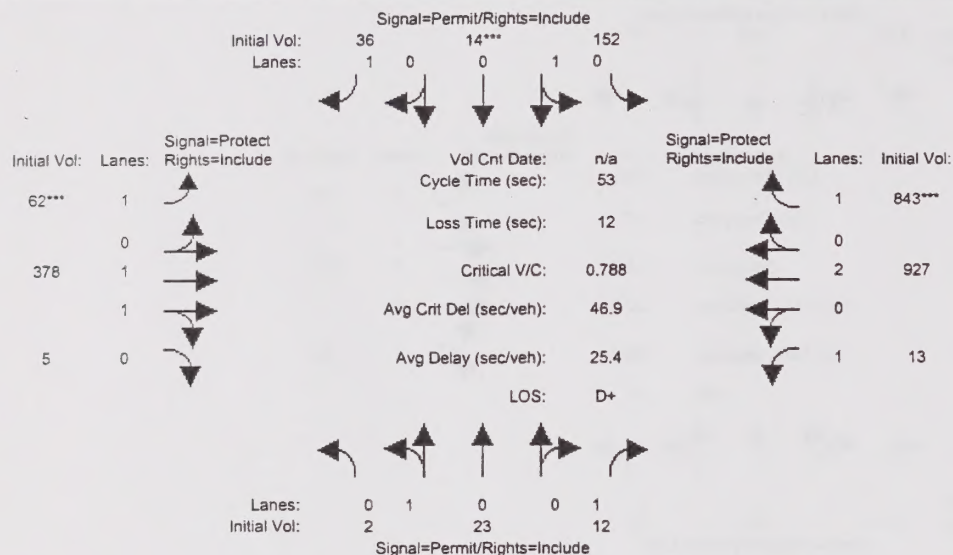
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1750	3227	472	1750	1900	1750	1750	1900	1750	1750	1619	181

Capacity Analysis Module:

Vol/Sat:	0.13	0.08	0.08	0.04	0.31	0.47	0.11	0.04	0.00	0.05	0.45	0.45
Crit Moves:	****					****	****				****	
Green Time:	10.0	27.8	27.8	19.5	37.2	37.2	10.0	10.0	0.0	35.7	35.7	35.7
Volume/Cap:	1.32	0.29	0.29	0.24	0.87	1.32	1.10	0.45	0.00	0.13	1.32	1.32
Delay/Veh:	273.8	23.4	23.4	27.8	27.7	228.9	130.5	35.4	0.0	18.2	235	235.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	273.8	23.4	23.4	27.8	27.7	228.9	130.5	35.4	0.0	18.2	235	235.3
DesignQueue:	12	11	2	4	24	35	10	4	0	3	31	4

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Intersection #16: Fruitvale Ave. Saratoga Los Gatos Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10

Volume Module:

Base Vol:	2	23	12	152	14	36	62	378	5	13	927	843
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	23	12	152	14	36	62	378	5	13	927	843
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	23	12	152	14	36	62	378	5	13	927	843
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	23	12	152	14	36	62	378	5	13	927	843
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	23	12	152	14	36	62	378	5	13	927	843
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	23	12	152	14	36	62	378	5	13	927	843

Saturation Flow Module:

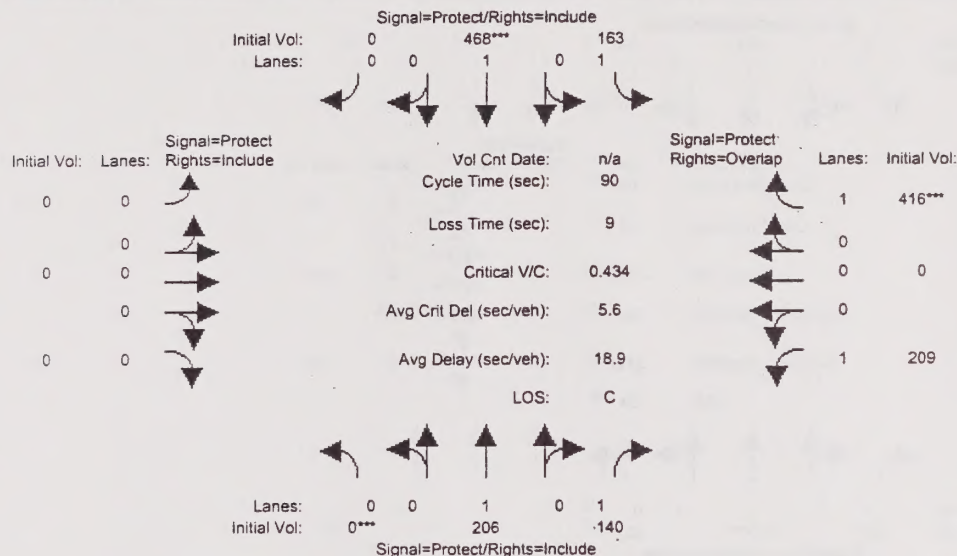
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	0.08	0.92	1.00	0.92	0.08	1.00	1.00	1.97	0.03	1.00	2.00	1.00
Final Sat.:	144	1656	1750	1648	152	1750	1750	3652	48	1750	3800	1750

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.01	0.09	0.09	0.02	0.04	0.10	0.10	0.01	0.24	0.48
Crit Moves:				****			****					****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	7.0	18.2	18.2	12.8	24.0	24.0
Volume/Cap:	0.07	0.07	0.04	0.49	0.49	0.11	0.27	0.30	0.30	0.03	0.54	1.06
Delay/Veh:	13.4	13.4	13.3	15.5	15.5	13.5	15.9	9.7	9.7	11.7	8.2	55.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.4	13.4	13.3	15.5	15.5	13.5	15.9	9.7	9.7	11.7	8.2	55.4
DesignQueue:	0	1	0	4	0	1	2	8	0	0	16	15

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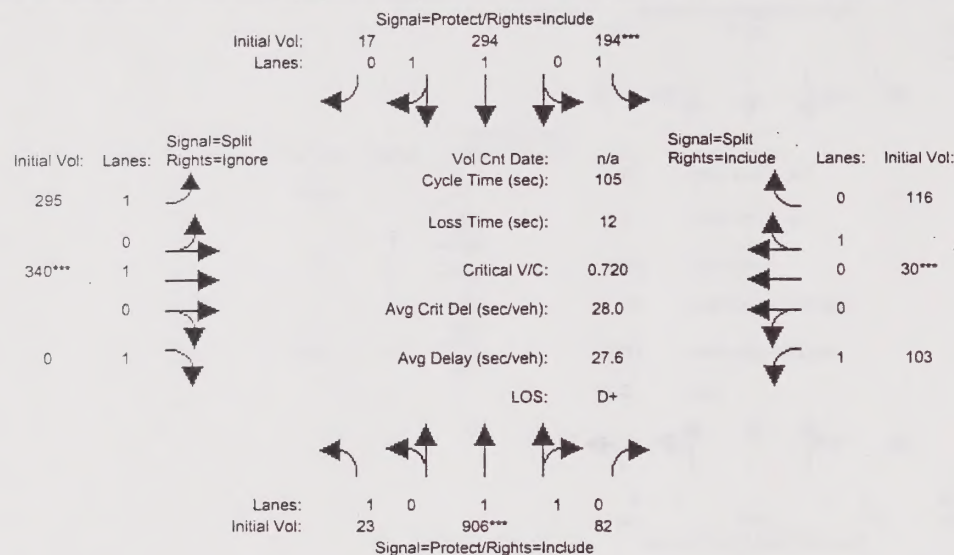
Intersection #14: Quito Rd. Pollard Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	206	140	163	468	0	0	0	0	209	0	416
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	140	163	468	0	0	0	0	209	0	416
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	206	140	163	468	0	0	0	0	209	0	416
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	206	140	163	468	0	0	0	0	209	0	416
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	206	140	163	468	0	0	0	0	209	0	416
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	206	140	163	468	0	0	0	0	209	0	416
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1900	1750	1750	1900	0	0	0	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.08	0.09	0.25	0.00	0.00	0.00	0.00	0.12	0.00	0.24
Crit Moves:	****				****							****
Green Time:	0.0	10.0	10.0	41.0	51.0	0.0	0.0	0.0	0.0	30.0	0.0	71.0
Volume/Cap:	0.00	0.98	0.72	0.20	0.43	0.00	0.00	0.00	0.00	0.36	0.00	0.30
Delay/Veh:	0.0	71.3	37.5	11.2	8.7	0.0	0.0	0.0	0.0	17.5	0.0	2.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	71.3	37.5	11.2	8.7	0.0	0.0	0.0	0.0	17.5	0.0	2.0
DesignQueue:	0	9	6	5	11	0	0	0	0	7	0	5

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Intersection #15: Saratoga Sunnyvale Rd. Saratoga Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	23	906	82	194	294	17	295	340	109	103	30	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Initial Bse:	23	906	82	194	294	17	295	340	0	103	30	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	906	82	194	294	17	295	340	0	103	30	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	23	906	82	194	294	17	295	340	0	103	30	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	906	82	194	294	17	295	340	0	103	30	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	23	906	82	194	294	17	295	340	0	103	30	116

Saturation Flow Module:

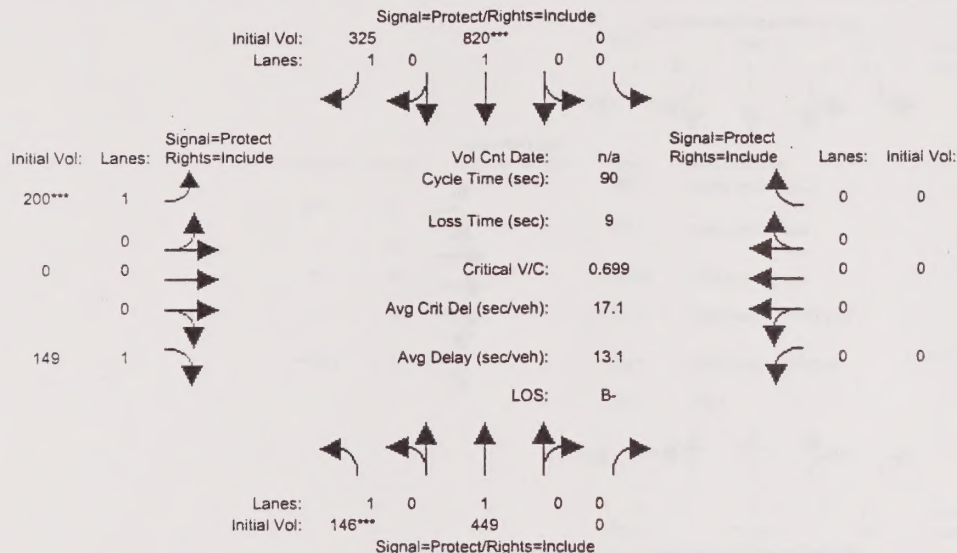
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.89	0.11	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	1750	3393	307	1750	3498	202	1750	1900	1750	1750	370	1430

Capacity Analysis Module:

Vol/Sat:	0.01	0.27	0.27	0.11	0.08	0.08	0.17	0.18	0.00	0.06	0.08	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	22.7	38.9	38.9	16.2	32.4	32.4	26.1	26.1	0.0	11.8	11.8	11.8
Volume/Cap:	0.06	0.72	0.72	0.72	0.27	0.27	0.68	0.72	0.00	0.52	0.72	0.72
Delay/Veh:	24.8	22.9	22.9	38.2	20.9	20.9	30.0	31.1	0.0	35.4	42.1	42.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	22.9	22.9	38.2	20.9	20.9	30.0	31.1	0.0	35.4	42.1	42.1
DesignQueue:	1	36	3	10	12	1	13	16	0	5	2	6

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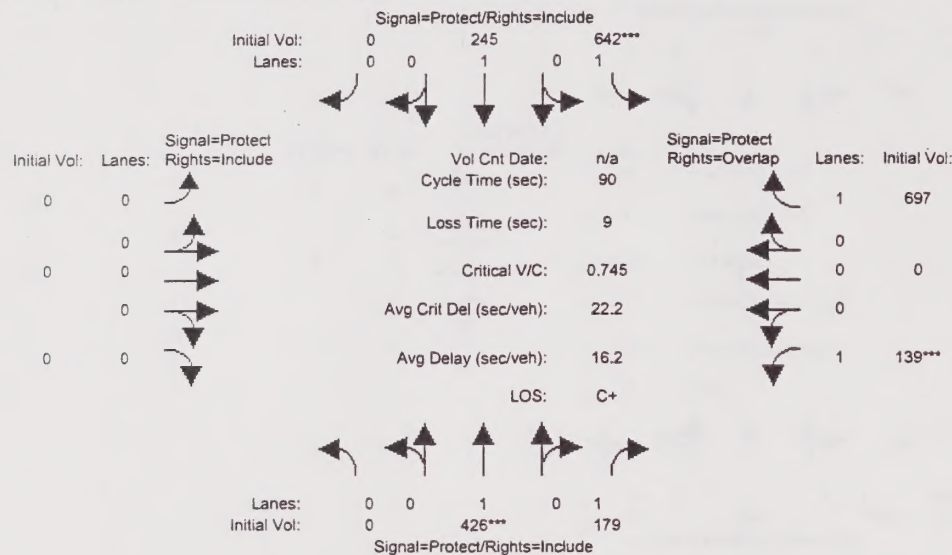
Intersection #13: Quito Rd. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0
Volume Module:												
Base Vol:	146	449	0	0	820	325	200	0	149	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	146	449	0	0	820	325	200	0	149	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	449	0	0	820	325	200	0	149	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	449	0	0	820	325	200	0	149	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	449	0	0	820	325	200	0	149	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	146	449	0	0	820	325	200	0	149	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.24	0.00	0.00	0.43	0.19	0.11	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green Time:	10.7	66.3	0.0	0.0	55.6	55.6	14.7	0.0	14.7	0.0	0.0	0.0
Volume/Cap:	0.70	0.32	0.00	0.00	0.70	0.30	0.70	0.00	0.52	0.00	0.00	0.00
Delay/Veh:	35.6	3.2	0.0	0.0	10.1	6.2	32.0	0.0	27.5	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.6	3.2	0.0	0.0	10.1	6.2	32.0	0.0	27.5	0.0	0.0	0.0
DesignQueue:	7	6	0	0	18	7	9	0	6	0	0	0

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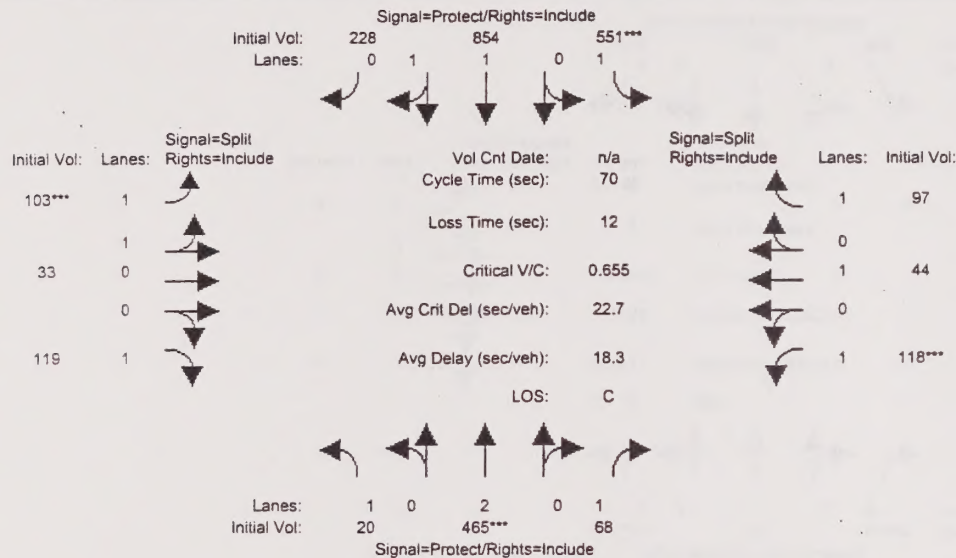
Intersection #14: Quito Rd. Pollard Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	426	179	642	245	0	0	0	0	139	0	697
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	426	179	642	245	0	0	0	0	139	0	697
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	426	179	642	245	0	0	0	0	139	0	697
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	426	179	642	245	0	0	0	0	139	0	697
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	426	179	642	245	0	0	0	0	139	0	697
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	426	179	642	245	0	0	0	0	139	0	697
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1900	1750	1750	1900	0	0	0	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.10	0.37	0.13	0.00	0.00	0.00	0.00	0.08	0.00	0.40
Crit Moves:	****			****						****		
Green Time:	0.0	27.1	27.1	44.3	71.4	0.0	0.0	0.0	0.0	9.6	0.0	53.9
Volume/Cap:	0.00	0.74	0.34	0.74	0.16	0.00	0.00	0.00	0.00	0.74	0.00	0.66
Delay/Veh:	0.0	25.2	18.8	16.4	1.7	0.0	0.0	0.0	0.0	39.6	0.0	10.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.2	18.8	16.4	1.7	0.0	0.0	0.0	0.0	39.6	0.0	10.3
DesignQueue:	0	16	6	18	3	0	0	0	0	6	0	15

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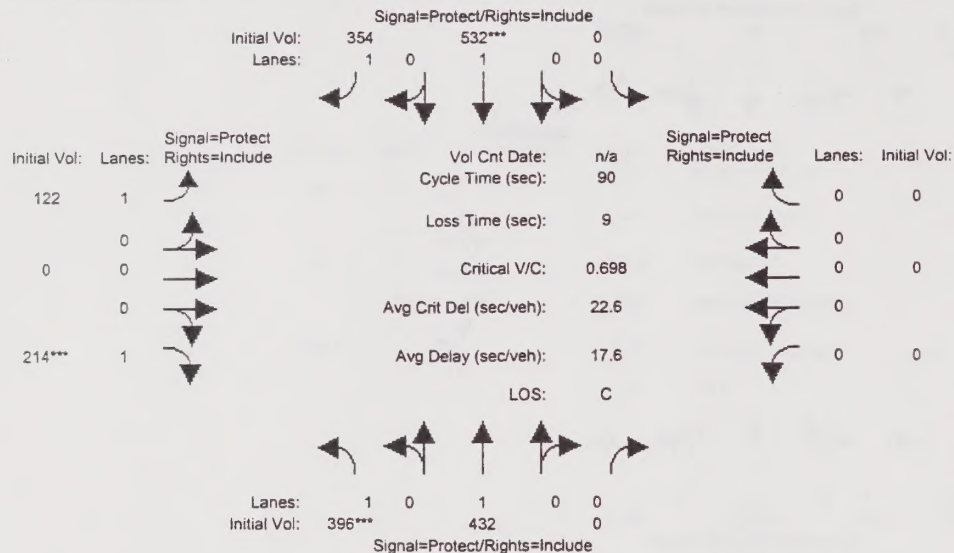
Intersection #12: Fruitvale Ave. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	20	465	68	551	854	228	103	33	119	118	44	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	465	68	551	854	228	103	33	119	118	44	97
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	465	68	551	854	228	103	33	119	118	44	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	465	68	551	854	228	103	33	119	118	44	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	465	68	551	854	228	103	33	119	118	44	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	465	68	551	854	228	103	33	119	118	44	97
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.04	1.00	0.98	1.00	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.57	0.43	1.52	0.48	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2920	780	2688	861	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.04	0.31	0.29	0.29	0.04	0.04	0.07	0.07	0.02	0.06
Crit Moves:	****			****			****			****		
Green Time:	7.0	10.6	10.6	27.4	31.0	31.0	10.0	10.0	10.0	10.0	10.0	10.0
Volume/Cap:	0.11	0.81	0.26	0.81	0.66	0.66	0.27	0.27	0.48	0.47	0.16	0.39
Delay/Veh:	21.8	27.5	20.0	19.3	12.4	12.4	20.4	20.4	22.1	22.0	20.0	21.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.8	27.5	20.0	19.3	12.4	12.4	20.4	20.4	22.1	22.0	20.0	21.2
DesignQueue:	1	16	2	14	20	5	3	1	4	4	1	3

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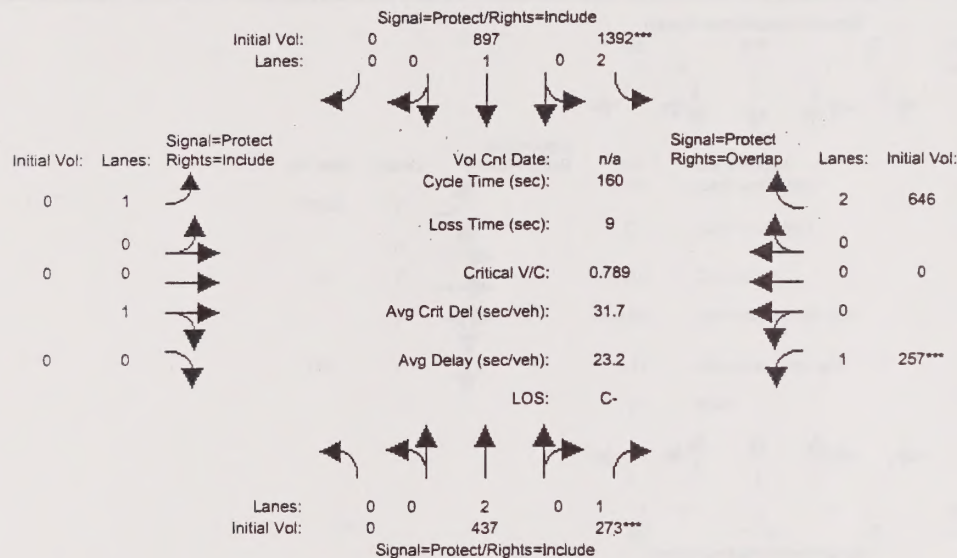
Intersection #13: Quito Rd. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0
Volume Module:												
Base Vol:	396	432	0	0	532	354	122	0	214	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	396	432	0	0	532	354	122	0	214	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	396	432	0	0	532	354	122	0	214	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	396	432	0	0	532	354	122	0	214	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	396	432	0	0	532	354	122	0	214	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	396	432	0	0	532	354	122	0	214	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.00	0.00	0.28	0.20	0.07	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****			****					****			
Green Time:	29.2	65.2	0.0	0.0	36.1	36.1	15.8	0.0	15.8	0.0	0.0	0.0
Volume/Cap:	0.70	0.31	0.00	0.00	0.70	0.50	0.40	0.00	0.70	0.00	0.00	0.00
Delay/Veh:	22.8	3.4	0.0	0.0	19.0	15.9	25.5	0.0	31.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjPctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.8	3.4	0.0	0.0	19.0	15.9	25.5	0.0	31.2	0.0	0.0	0.0
DesignQueue:	14	6	0	0	17	11	5	0	9	0	0	0

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Intersection #11: Saratoga Ave. Fruitvale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10

Volume Module:

Base Vol:	0	437	273	1392	897	0	0	0	0	257	0	646
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	437	273	1392	897	0	0	0	0	257	0	646
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	437	273	1392	897	0	0	0	0	257	0	646
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	437	273	1392	897	0	0	0	0	257	0	646
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	437	273	1392	897	0	0	0	0	257	0	646
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	437	273	1392	897	0	0	0	0	257	0	646

Saturation Flow Module:

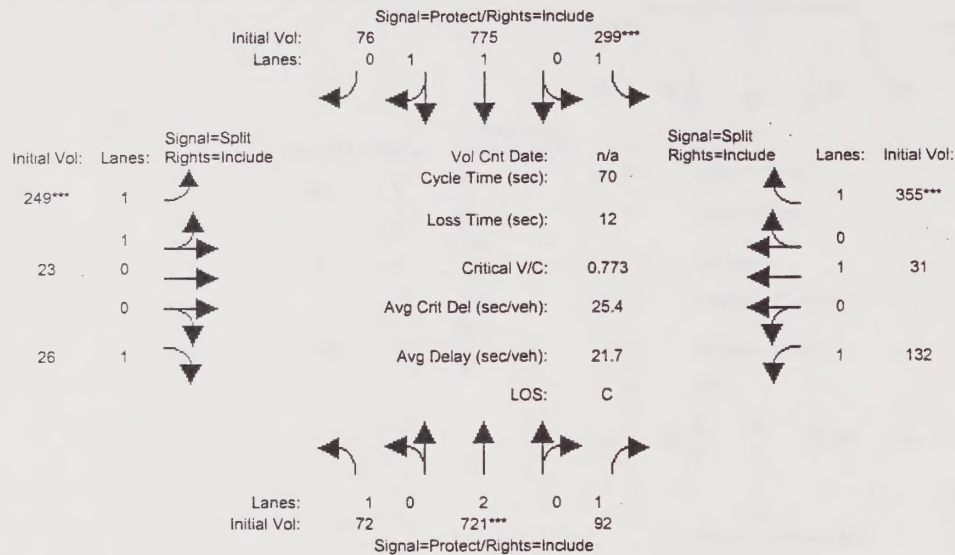
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.88
Lanes:	0.00	2.00	1.00	2.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3800	1750	3150	1900	0	1750	1800	0	1750	0	3150

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.16	0.44	0.47	0.00	0.00	0.00	0.00	0.15	0.00	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	0.0	31.6	31.6	89.6	121	0.0	0.0	0.0	0.0	29.8	0.0	119.4
Volume/Cap:	0.00	0.58	0.79	0.79	0.62	0.00	0.00	0.00	0.00	0.79	0.00	0.27
Delay/Veh:	0.0	45.1	54.3	22.9	7.4	0.0	0.0	0.0	0.0	55.6	0.0	4.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	45.1	54.3	22.9	7.4	0.0	0.0	0.0	0.0	55.6	0.0	4.9
DesignQueue:	0	32	20	60	22	0	0	0	0	19	0	15

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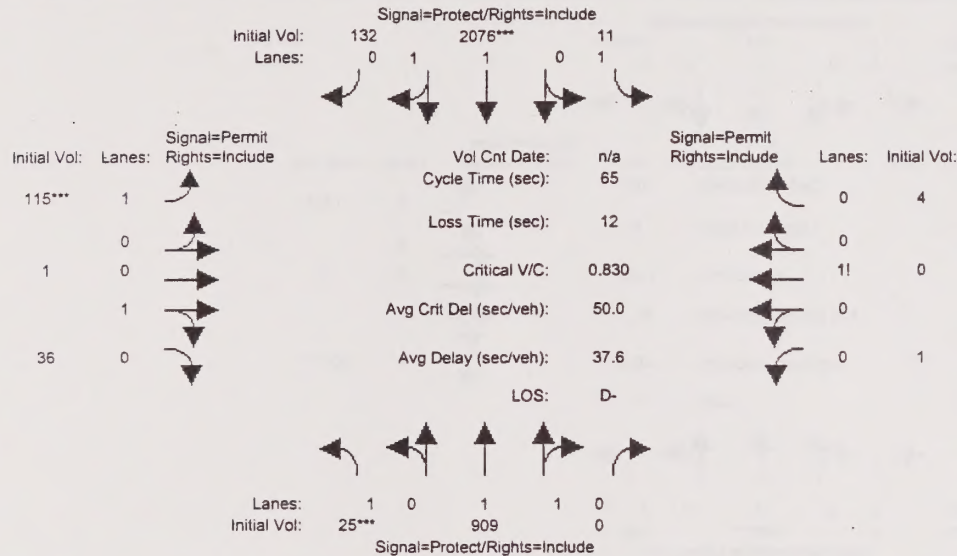
Intersection #12: Fruitvale Ave. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	72	721	92	299	775	76	249	23	26	132	31	355
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	721	92	299	775	76	249	23	26	132	31	355
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	721	92	299	775	76	249	23	26	132	31	355
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	721	92	299	775	76	249	23	26	132	31	355
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	721	92	299	775	76	249	23	26	132	31	355
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	72	721	92	299	775	76	249	23	26	132	31	355
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.03	1.00	0.98	1.00	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.82	0.18	1.83	0.17	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3369	330	3250	300	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.05	0.17	0.23	0.23	0.08	0.08	0.01	0.08	0.02	0.20
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	7.0	16.2	16.2	14.6	23.7	23.7	10.0	10.0	10.0	17.3	17.3	17.3
Volume/Cap:	0.41	0.82	0.23	0.82	0.68	0.68	0.54	0.54	0.10	0.31	0.07	0.82
Delay/Veh:	23.4	23.9	16.7	29.7	16.2	16.2	22.1	22.1	19.8	16.4	15.3	27.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.4	23.9	16.7	29.7	16.2	16.2	22.1	22.1	19.8	16.4	15.3	27.2
DesignQueue:	3	23	3	10	21	2	8	1	1	4	1	11

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Intersection #10: Saratoga Ave. Scotland Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	7	10	10	10	10	10	10	0	10

Volume Module:

Base Vol:	25	909	0	11	2076	132	115	1	36	1	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	909	0	11	2076	132	115	1	36	1	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	909	0	11	2076	132	115	1	36	1	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	909	0	11	2076	132	115	1	36	1	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	909	0	11	2076	132	115	1	36	1	0	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	25	909	0	11	2076	132	115	1	36	1	0	4

Saturation Flow Module:

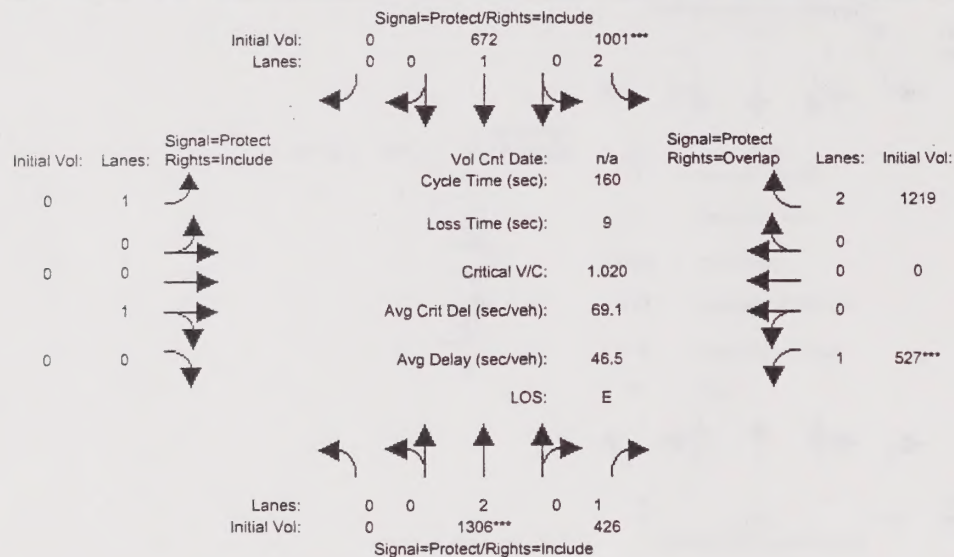
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	0.97	0.97	1.03	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	2.00	0.00	1.00	1.88	0.12	1.00	0.03	0.97	0.20	0.00	0.80
Final Sat.:	1750	3700	0	1750	3479	221	1750	49	1751	350	0	1400

Capacity Analysis Module:

Vol/Sat:	0.01	0.25	0.00	0.01	0.60	0.60	0.07	0.02	0.02	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green Time:	7.0	36.0	0.0	7.0	36.0	36.0	10.0	10.0	10.0	10.0	0.0	10.0
Volume/Cap:	0.13	0.44	0.00	0.06	1.08	1.08	0.43	0.13	0.13	0.02	0.00	0.02
Delay/Veh:	20.0	6.6	0.0	19.8	51.9	51.9	19.6	18.1	18.1	17.7	0.0	17.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.0	6.6	0.0	19.8	51.9	51.9	19.6	18.1	18.1	17.7	0.0	17.7
DesignQueue:	1	16	0	0	40	3	4	0	1	0	0	0

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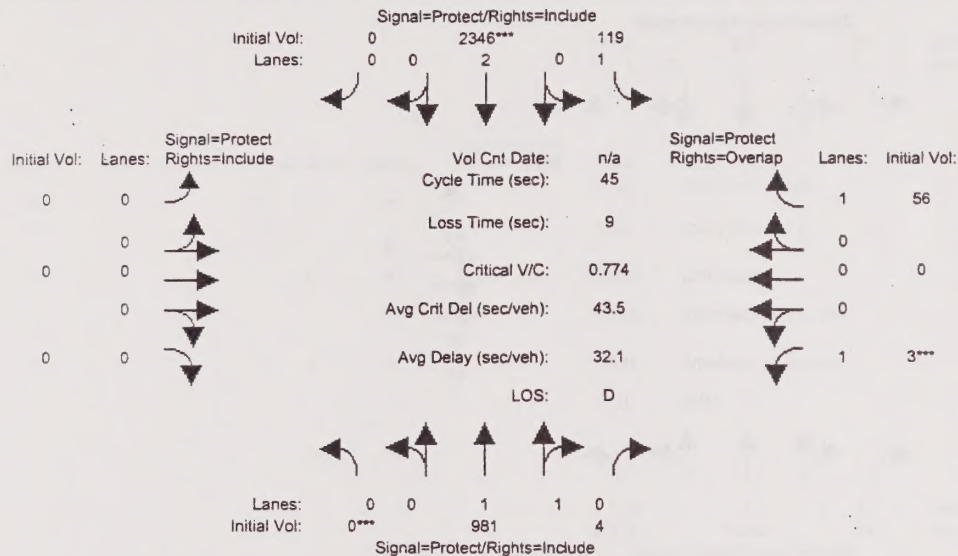
Intersection #11: Saratoga Ave. Fruitvale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Volume Module:												
Base Vol:	0	1306	426	1001	672	0	0	0	0	527	0	1219
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1306	426	1001	672	0	0	0	0	527	0	1219
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1306	426	1001	672	0	0	0	0	527	0	1219
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1306	426	1001	672	0	0	0	0	527	0	1219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1306	426	1001	672	0	0	0	0	527	0	1219
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1306	426	1001	672	0	0	0	0	527	0	1219
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.88
Lanes:	0.00	2.00	1.00	2.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3800	1750	3150	1900	0	1750	1800	0	1750	0	3150
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.24	0.32	0.35	0.00	0.00	0.00	0.00	0.30	0.00	0.39
Crit Moves:	****			****						****		
Green Time:	0.0	53.9	53.9	49.8	104	0.0	0.0	0.0	0.0	47.2	0.0	97.1
Volume/Cap:	0.00	1.02	0.72	1.02	0.55	0.00	0.00	0.00	0.00	1.02	0.00	0.64
Delay/Veh:	0.0	65.0	38.3	69.3	12.0	0.0	0.0	0.0	0.0	79.0	0.0	15.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	65.0	38.3	69.3	12.0	0.0	0.0	0.0	0.0	79.0	0.0	15.8
DesignQueue:	0	85	27	66	23	0	0	0	0	36	0	47

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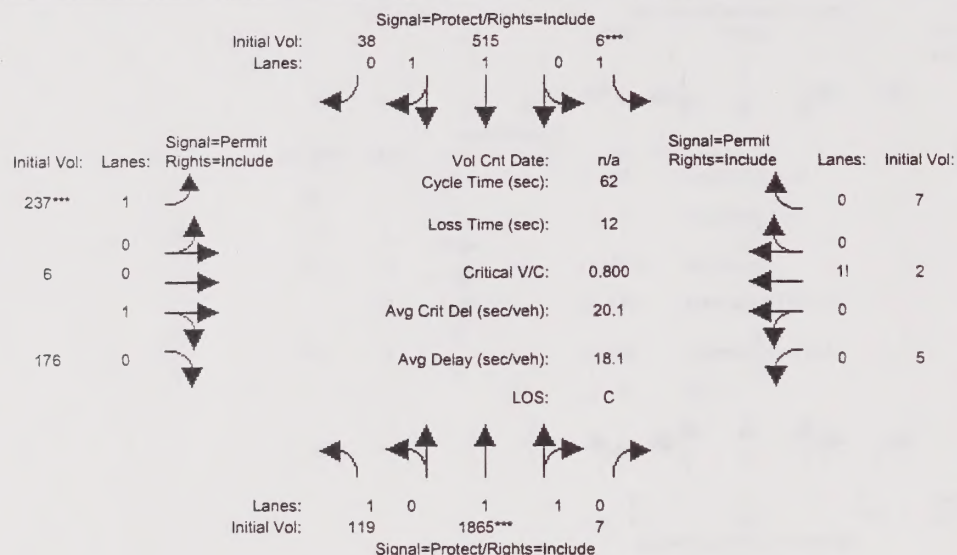
Intersection #9: Saratoga Ave. Dagmar Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Volume Module:												
Base Vol:	0	981	4	119	2346	0	0	0	0	3	0	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	981	4	119	2346	0	0	0	0	3	0	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	981	4	119	2346	0	0	0	0	3	0	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	981	4	119	2346	0	0	0	0	3	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	981	4	119	2346	0	0	0	0	3	0	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	981	4	119	2346	0	0	0	0	3	0	56
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.99	0.01	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3685	15	1750	3800	0	0	0	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.07	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Crit Moves:	****			****						****		
Green Time:	0.0	19.0	19.0	7.0	26.0	0.0	0.0	0.0	0.0	10.0	0.0	17.0
Volume/Cap:	0.00	0.63	0.63	0.44	1.07	0.00	0.00	0.00	0.00	0.01	0.00	0.08
Delay/Veh:	0.0	8.4	8.4	13.8	43.6	0.0	0.0	0.0	0.0	10.4	0.0	6.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.4	8.4	13.8	43.6	0.0	0.0	0.0	0.0	10.4	0.0	6.8
DesignQueue:	0	15	0	3	30	0	0	0	0	0	0	1

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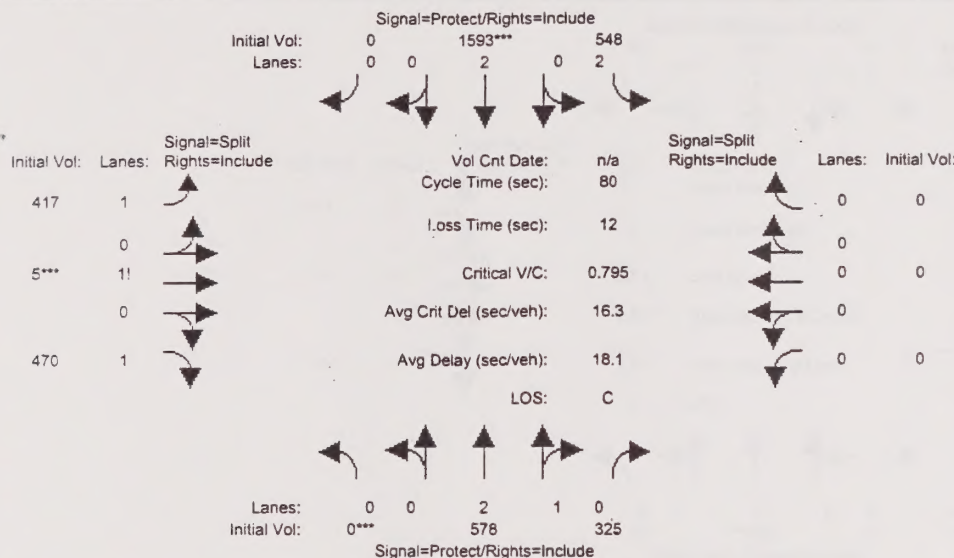
Intersection #10: Saratoga Ave. Scotland Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	119	1865	7	6	515	38	237	6	176	5	2	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	1865	7	6	515	38	237	6	176	5	2	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	119	1865	7	6	515	38	237	6	176	5	2	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	1865	7	6	515	38	237	6	176	5	2	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1865	7	6	515	38	237	6	176	5	2	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	119	1865	7	6	515	38	237	6	176	5	2	7
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.86	0.14	1.00	0.03	0.97	0.36	0.14	0.50
Final Sat.:	1750	3686	14	1750	3446	254	1750	59	1741	625	250	875
Capacity Analysis Module:												
Vol/Sat:	0.07	0.51	0.51	0.00	0.15	0.15	0.14	0.10	0.10	0.01	0.01	0.01
Crit Moves:	****			****			****					
Green Time:	16.5	33.0	33.0	7.0	23.5	23.5	10.0	10.0	10.0	10.0	10.0	10.0
Volume/Cap:	0.26	0.95	0.95	0.03	0.39	0.39	0.84	0.63	0.63	0.05	0.05	0.05
Delay/Veh:	13.7	18.5	18.5	18.6	10.8	10.8	32.6	21.4	21.4	16.7	16.7	16.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.7	18.5	18.5	18.6	10.8	10.8	32.6	21.4	21.4	16.7	16.7	16.7
DesignQueue:	3	35	0	0	11	1	7	0	5	0	0	0

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Intersection #8: Saratoga Ave. SB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0

Volume Module:

Base Vol:	0	578	325	548	1593	0	417	5	470	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	578	325	548	1593	0	417	5	470	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	578	325	548	1593	0	417	5	470	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	578	325	548	1593	0	417	5	470	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	578	325	548	1593	0	417	5	470	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	578	325	548	1593	0	417	5	470	0	0	0

Saturation Flow Module:

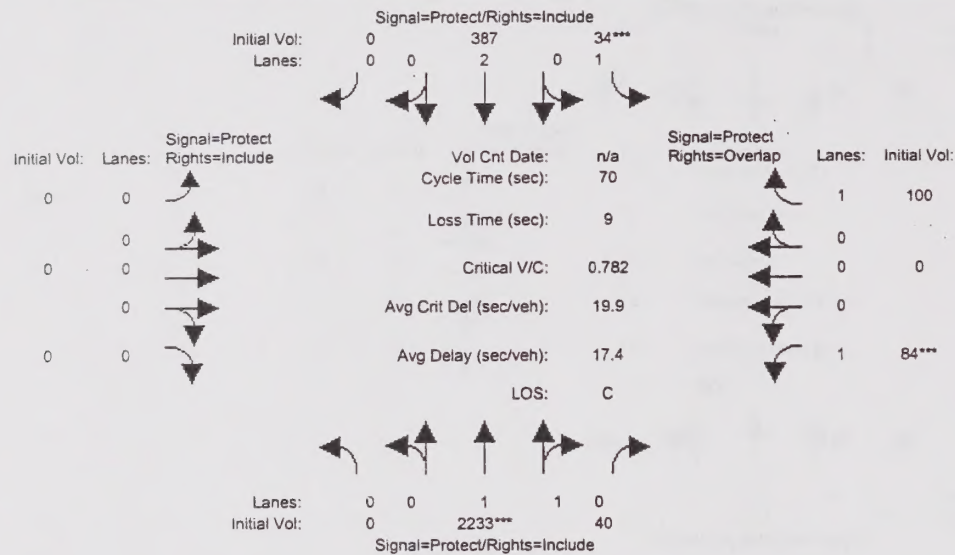
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	0.97	0.97	0.97	1.06	0.97
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.46	0.01	1.53	0.00	0.00	0.00
Final Sat.:	0	3800	1750	3150	3800	0	2564	20	2667	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.19	0.17	0.42	0.00	0.16	0.26	0.18	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green Time:	0.0	21.8	21.8	20.4	42.2	0.0	25.8	25.8	25.8	0.0	0.0	0.0
Volume/Cap:	0.00	0.56	0.68	0.68	0.79	0.00	0.50	0.79	0.55	0.00	0.00	0.00
Delay/Veh:	0.0	19.3	20.8	22.1	13.3	0.0	16.9	21.6	17.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.3	20.8	22.1	13.3	0.0	16.9	21.6	17.2	0.0	0.0	0.0
DesignQueue:	0	19	11	19	38	0	13	0	15	0	0	0

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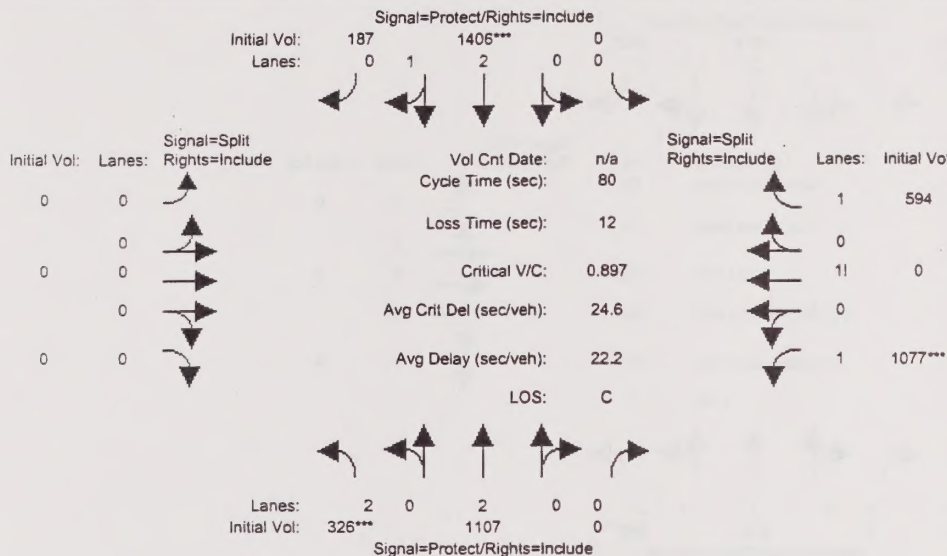
Intersection #9: Saratoga Ave. Dagmar Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Volume Module:												
Base Vol:	0	2233	40	34	387	0	0	0	0	84	0	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2233	40	34	387	0	0	0	0	84	0	100
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2233	40	34	387	0	0	0	0	84	0	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2233	40	34	387	0	0	0	0	84	0	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2233	40	34	387	0	0	0	0	84	0	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2233	40	34	387	0	0	0	0	84	0	100
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3635	65	1750	3800	0	0	0	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.61	0.61	0.02	0.10	0.00	0.00	0.00	0.00	0.05	0.00	0.06
Crit Moves:	****			****						****		
Green Time:	0.0	44.0	44.0	7.0	51.0	0.0	0.0	0.0	0.0	10.0	0.0	17.0
Volume/Cap:	0.00	0.98	0.98	0.19	0.14	0.00	0.00	0.00	0.00	0.34	0.00	0.24
Delay/Veh:	0.0	19.8	19.8	22.0	2.2	0.0	0.0	0.0	0.0	20.8	0.0	16.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjPctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.8	19.8	22.0	2.2	0.0	0.0	0.0	0.0	20.8	0.0	16.2
DesignQueue:	0	38	1	1	4	0	0	0	0	3	0	3

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Intersection #7: Saratoga Ave. NB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	7	0	10

Volume Module:

Base Vol:	326	1107	0	0	1406	187	0	0	0	1077	0	594
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	326	1107	0	0	1406	187	0	0	0	1077	0	594
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	326	1107	0	0	1406	187	0	0	0	1077	0	594
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	326	1107	0	0	1406	187	0	0	0	1077	0	594
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	326	1107	0	0	1406	187	0	0	0	1077	0	594
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	326	1107	0	0	1406	187	0	0	0	1077	0	594

Saturation Flow Module:

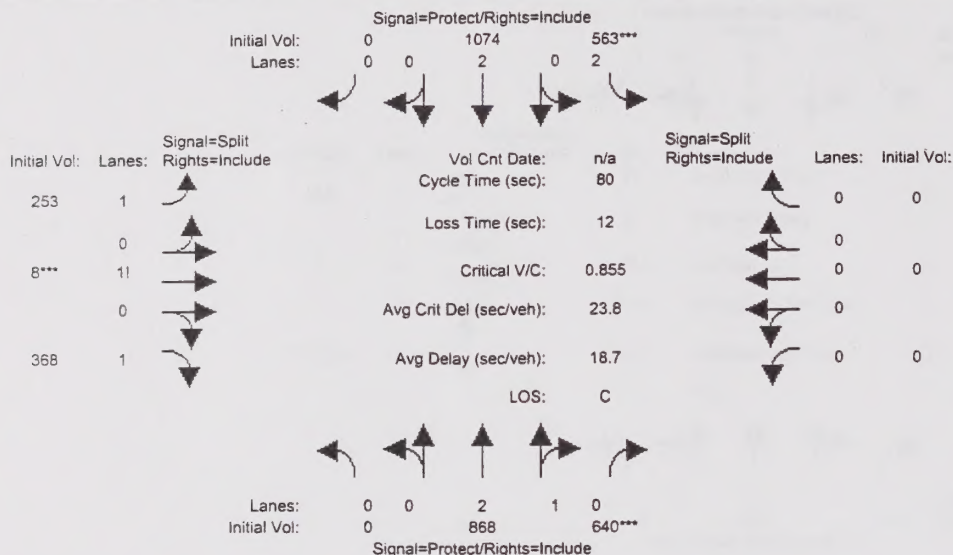
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.04	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	2.00	2.00	0.00	0.00	2.63	0.37	0.00	0.00	0.00	1.64	0.00	1.36
Final Sat.:	3150	3800	0	0	4942	657	0	0	0	2878	0	2372

Capacity Analysis Module:

Vol/Sat:	0.10	0.29	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.37	0.00	0.25
Crit Moves:	****			****						****		
Green Time:	9.2	34.6	0.0	0.0	25.4	25.4	0.0	0.0	0.0	33.4	0.0	33.4
Volume/Cap:	0.90	0.67	0.00	0.00	0.90	0.90	0.00	0.00	0.00	0.90	0.00	0.60
Delay/Veh:	43.3	14.6	0.0	0.0	24.5	24.5	0.0	0.0	0.0	21.0	0.0	14.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjPctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	14.6	0.0	0.0	24.5	24.5	0.0	0.0	0.0	21.0	0.0	14.0
DesignQueue:	13	30	0	0	46	6	0	0	0	31	0	16

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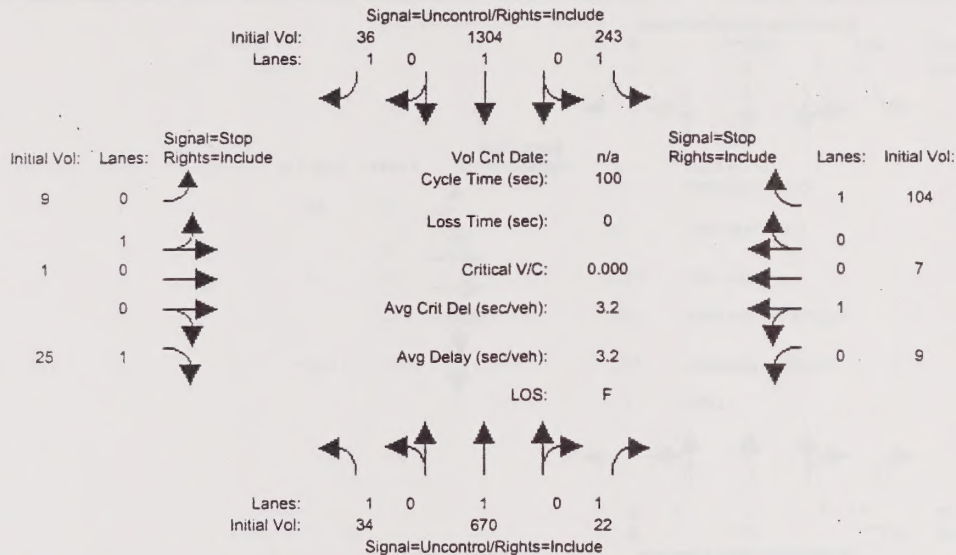
Intersection #8: Saratoga Ave. SB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Volume Module:												
Base Vol:	0	868	640	563	1074	0	253	8	368	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	868	640	563	1074	0	253	8	368	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	868	640	563	1074	0	253	8	368	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	868	640	563	1074	0	253	8	368	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	868	640	563	1074	0	253	8	368	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	868	640	563	1074	0	253	8	368	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	0.97	0.97	0.97	1.06	0.97
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.40	0.02	1.58	0.00	0.00	0.00
Final Sat.:	0	3800	1750	3150	3800	0	2445	44	2761	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.37	0.18	0.28	0.00	0.10	0.18	0.13	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:	0.0	34.2	34.2	16.7	51.0	0.0	17.0	17.0	17.0	0.0	0.0	0.0
Volume/Cap:	0.00	0.53	0.85	0.85	0.44	0.00	0.49	0.85	0.63	0.00	0.00	0.00
Delay/Veh:	0.0	13.1	18.8	30.6	5.7	0.0	21.2	29.8	22.6	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.1	18.8	30.6	5.7	0.0	21.2	29.8	22.6	0.0	0.0	0.0
DesignQueue:	0	23	18	21	19	0	9	0	13	0	0	0

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
PM Peak

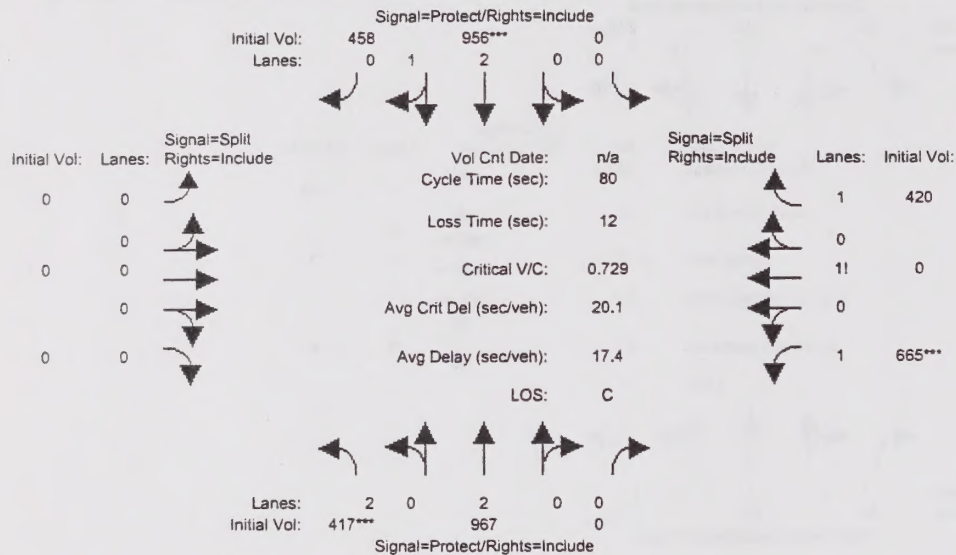
Intersection #6: Quito Rd. McCoy Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	34	670	22	243	1304	36	9	1	25	9	7	104
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	670	22	243	1304	36	9	1	25	9	7	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	670	22	243	1304	36	9	1	25	9	7	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	670	22	243	1304	36	9	1	25	9	7	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	34	670	22	243	1304	36	9	1	25	9	7	104
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	37	670	22	267	1304	36	10	1	28	10	8	114
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx	3.4	3.3	2.6	3.4	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxxx	5.0	xxxx	xxxxxx	6.5	6.0	5.5	6.5	6.0	5.5
Capacity Module:												
Cnflct Vol:	1340	xxxx	xxxxxx	692	xxxx	xxxxxx	2307	2273	1304	2264	2287	670
Potent Cap.:	394	xxxx	xxxxxx	802	xxxx	xxxxxx	49	70	302	52	69	634
Adj Cap:	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx	0.49	0.60	1.00	0.62	0.60	1.00
Move Cap.:	394	xxxx	xxxxxx	802	xxxx	xxxxxx	24	42	302	32	42	634
Level Of Service Module:												
Stopped Del:	10.0	xxxx	xxxxxx	6.4	xxxx	xxxxxx	233.5	87.3	13.0	155.8	104	6.8
LOS by Move:	B	*	*	B	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	25	xxxx	xxxxxx	36	xxxx	xxxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	218.9	xxxx	xxxxxx	133.1	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	0.5			1.1			71.8			23.6		

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

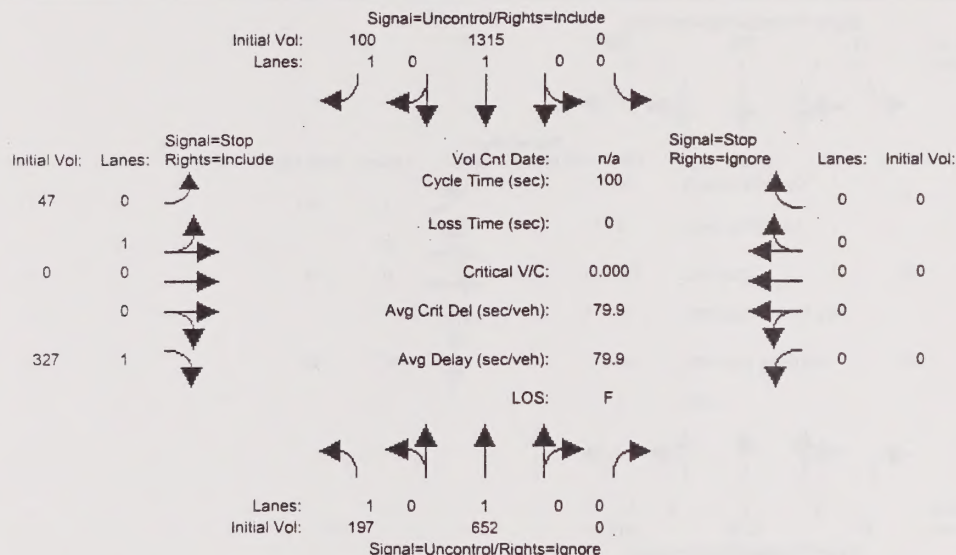
Intersection #7: Saratoga Ave. NB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	7	0	10
Volume Module:												
Base Vol:	417	967	0	0	956	458	0	0	0	665	0	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	417	967	0	0	956	458	0	0	0	665	0	420
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	417	967	0	0	956	458	0	0	0	665	0	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	417	967	0	0	956	458	0	0	0	665	0	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	417	967	0	0	956	458	0	0	0	665	0	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	417	967	0	0	956	458	0	0	0	665	0	420
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.05	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.61	0.00	1.39
Final Sat.:	3150	3800	0	0	3797	1800	0	0	0	2823	0	2427
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.24	0.00	0.17
Crit Moves:	****			****						****		
Green Time:	14.5	42.1	0.0	0.0	27.6	27.6	0.0	0.0	0.0	25.9	0.0	25.9
Volume/Cap:	0.73	0.48	0.00	0.00	0.73	0.74	0.00	0.00	0.00	0.73	0.00	0.54
Delay/Veh:	26.7	9.3	0.0	0.0	18.4	18.6	0.0	0.0	0.0	19.5	0.0	17.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.7	9.3	0.0	0.0	18.4	18.6	0.0	0.0	0.0	19.5	0.0	17.1
DesignQueue:	16	22	0	0	30	14	0	0	0	21	0	13

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
PM Peak

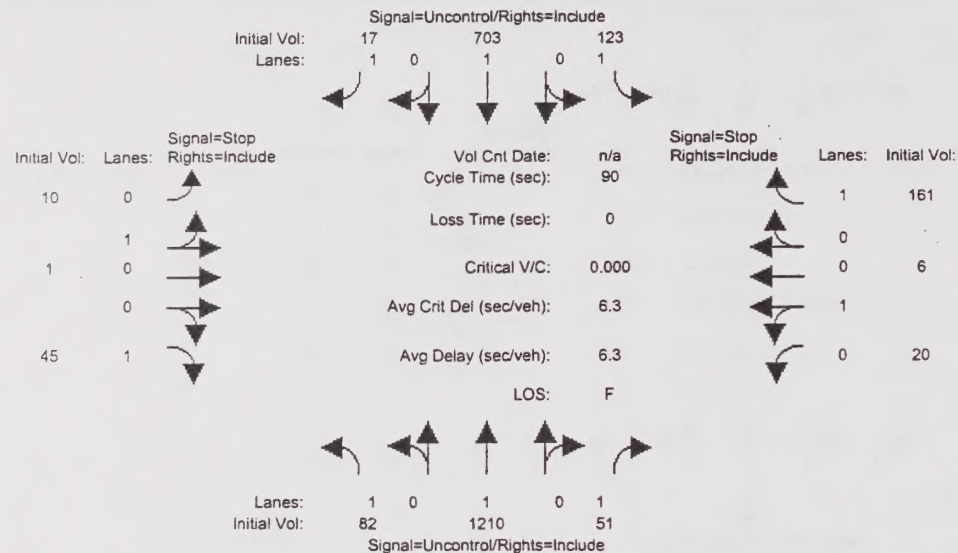
Intersection #5: Quito Rd. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	197	652	0	0	1315	100	47	0	327	0	0	0
Growth Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	197	652	0	0	1315	100	47	0	327	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	197	652	0	0	1315	100	47	0	327	0	0	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	197	652	0	0	1315	100	47	0	327	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	197	652	0	0	1315	100	47	0	327	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	217	652	0	0	1315	100	52	0	360	0	0	0
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.4	xxxx	2.6	xxxxxx	xxxx	xxxxxx
Critical Gp:	5.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.5	xxxx	5.5	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflict Vol:	1415	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2164	xxxx	1315	xxxx	xxxx	xxxxxx
Potent Cap.:	363	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	59	xxxx	299	xxxx	xxxx	xxxxxx
Adj Cap:	1.00	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.40	xxxx	1.00	xxxx	xxxx	xxxxxx
Move Cap.:	363	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	24	xxxx	299	xxxx	xxxx	xxxxxx
Level Of Service Module:												
Stopped Del:	21.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2169	xxxx	274.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	D	*	*	*	*	*	*	*	F	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	24	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2169	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	5.4			0.0			512.2			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
AM Peak

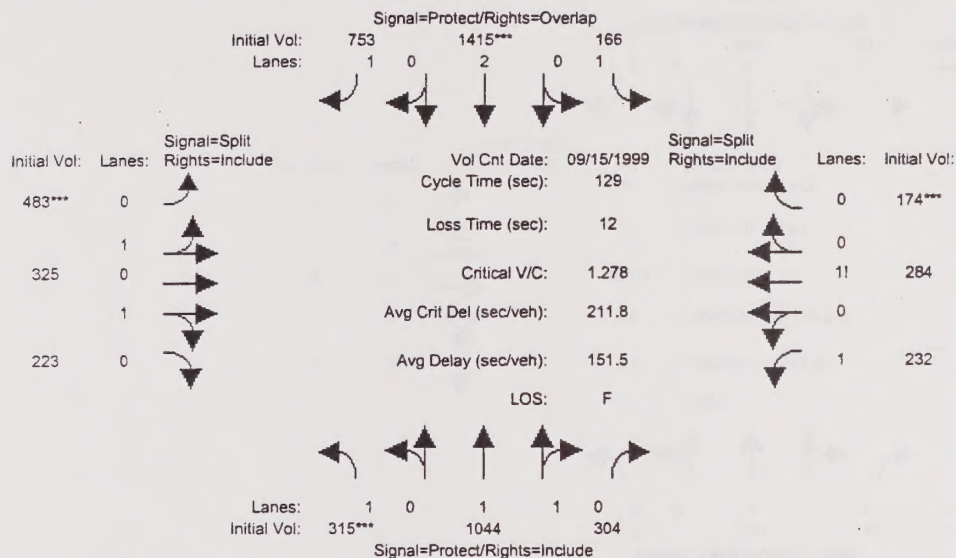
Intersection #6: Quito Rd. McCoy Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	82	1210	51	123	703	17	10	1	45	20	6	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	1210	51	123	703	17	10	1	45	20	6	161
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	1210	51	123	703	17	10	1	45	20	6	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	1210	51	123	703	17	10	1	45	20	6	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	82	1210	51	123	703	17	10	1	45	20	6	161
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	90	1210	51	135	703	17	11	1	50	22	7	177
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	3.3	2.6	3.4	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxx	5.0	xxxx	xxxxx	6.5	6.0	5.5	6.5	6.0	5.5
Capacity Module:												
Cnflict Vol:	720	xxxx	xxxxx	1261	xxxx	xxxxx	2202	2169	703	2141	2135	1210
Potent Cap.:	778	xxxx	xxxxx	430	xxxx	xxxxx	56	79	610	61	83	337
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.30	0.61	1.00	0.63	0.61	1.00
Move Cap.:	778	xxxx	xxxxx	430	xxxx	xxxxx	17	48	610	38	50	337
Level Of Service Module:												
Stopped Del:	5.2	xxxx	xxxxx	11.7	xxxx	xxxxx	453.0	76.5	6.4	187.9	81.6	20.3
LOS by Move:	B	*	*	C	*	*	*	*	B	*	*	D
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	18	xxxx	xxxxx	40	xxxx	xxxxx
Shrd StpDel:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	418.7	xxxx	xxxxx	163.3	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	0.3			1.9			87.4			40.2		

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

Intersection #4: Saratoga Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

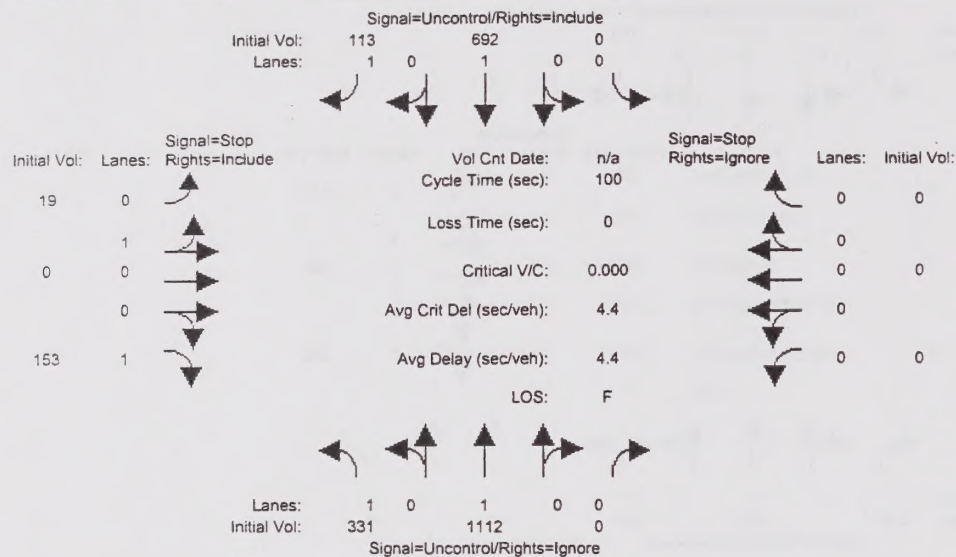
Volume Module: >> Count Date: 15 Sep 1999 <<												
Base Vol:	315	1044	304	166	1415	753	483	325	223	232	284	174
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	315	1044	304	166	1415	753	483	325	223	232	284	174
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	315	1044	304	166	1415	753	483	325	223	232	284	174
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	315	1044	304	166	1415	753	483	325	223	232	284	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	1044	304	166	1415	753	483	325	223	232	284	174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	315	1044	304	166	1415	753	483	325	223	232	284	174

Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.06	0.97	1.00	1.00	1.00	0.97	1.00	1.00
Lanes:	1.00	1.54	0.46	1.00	2.00	1.00	0.94	0.63	0.43	1.21	0.49	0.30
Final Sat.:	1750	2865	834	1750	3800	1750	1687	1135	779	2112	885	543

Capacity Analysis Module:												
Vol/Sat:	0.18	0.36	0.36	0.09	0.37	0.43	0.29	0.29	0.29	0.11	0.32	0.32
Crit Moves:	****			****			****					****
Green Time:	18.2	44.2	44.2	11.5	37.6	66.5	28.9	28.9	28.9	32.4	32.4	32.4
Volume/Cap:	1.28	1.06	1.06	1.06	1.28	0.84	1.28	1.28	1.28	0.44	1.28	1.28
Delay/Veh:	236.1	71.4	71.4	122.9	206	25.0	210.8	211	210.8	31.0	215	215.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	236.1	71.4	71.4	122.9	206	25.0	210.8	211	210.8	31.0	215	215.3
DesignQueue:	20	54	16	11	80	29	29	19	13	13	17	10

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
AM Peak

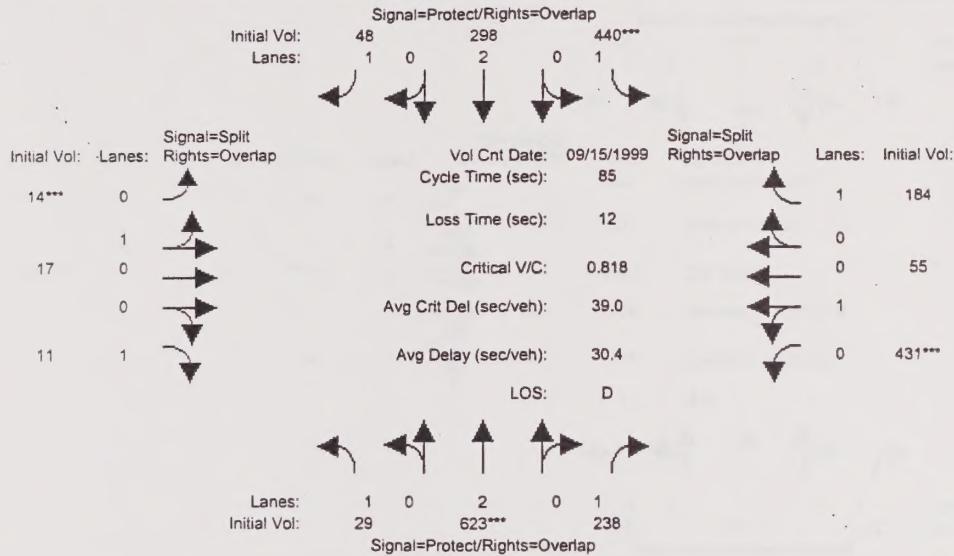
Intersection #5: Quito Rd. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	331	1112	0	0	692	113	19	0	153	0	0	0
Growth Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	331	1112	0	0	692	113	19	0	153	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	331	1112	0	0	692	113	19	0	153	0	0	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	331	1112	0	0	692	113	19	0	153	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	331	1112	0	0	692	113	19	0	153	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	364	1112	0	0	692	113	21	0	168	0	0	0
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx
Critical Gp:	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	805	xxxx	xxxxx	xxxx	xxxx	xxxxx	2135	xxxx	692	xxxx	xxxx	xxxxx
Potent Cap.:	709	xxxx	xxxxx	xxxx	xxxx	xxxxx	61	xxxx	618	xxxx	xxxx	xxxxx
Adj Cap:	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.49	xxxx	1.00	xxxx	xxxx	xxxxx
Move Cap.:	709	xxxx	xxxxx	xxxx	xxxx	xxxxx	30	xxxx	618	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	288.0	xxxx	7.7	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	30	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	288.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	2.3				0.0		38.7				0.0	

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

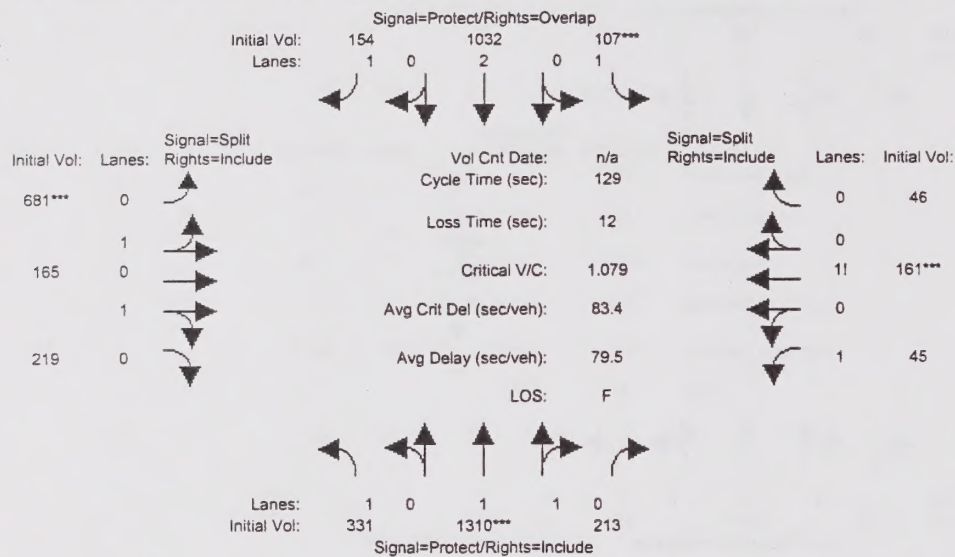
Intersection #3: Saratoga-Sunnyvale Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 15 Sep 1999 <<												
Base Vol:	29	623	238	440	298	48	14	17	11	431	55	184
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	623	238	440	298	48	14	17	11	431	55	184
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	623	238	440	298	48	14	17	11	431	55	184
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	623	238	440	298	48	14	17	11	431	55	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	623	238	440	298	48	14	17	11	431	55	184
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	29	623	238	440	298	48	14	17	11	431	55	184
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.45	0.55	1.00	0.89	0.11	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	813	987	1750	1596	204	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.14	0.25	0.08	0.03	0.02	0.02	0.01	0.27	0.27	0.11
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	15.7	15.1	39.9	23.1	22.5	32.5	10.0	10.0	25.7	24.8	24.8	47.9
Volume/Cap:	0.09	0.92	0.29	0.92	0.30	0.07	0.15	0.15	0.02	0.92	0.92	0.19
Delay/Veh:	21.8	39.6	10.6	40.1	19.0	12.7	25.6	25.6	15.8	38.2	38.2	6.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.8	39.6	10.6	40.1	19.0	12.7	25.6	25.6	15.8	38.2	38.2	6.9
DesignQueue:	1	25	6	16	11	1	1	1	0	15	2	4

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

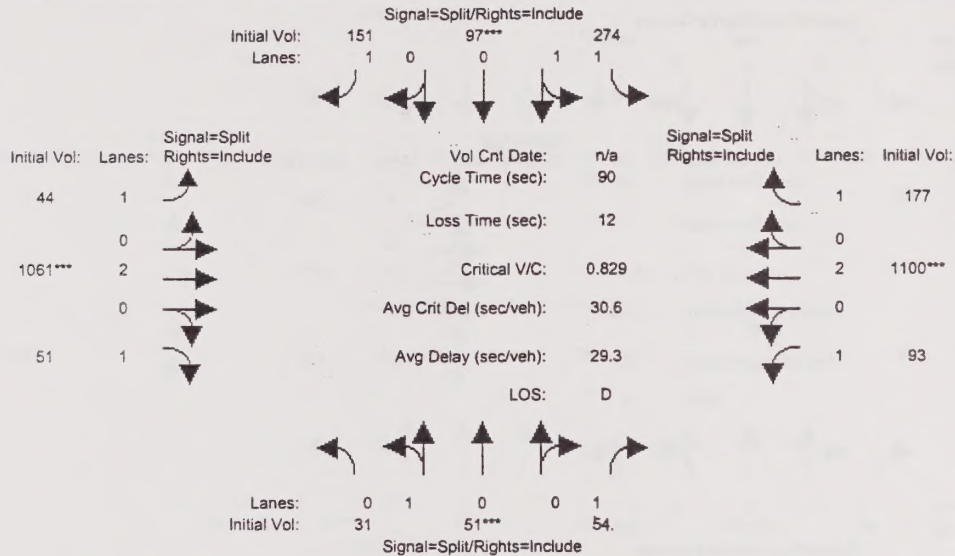
Intersection #4: Saratoga Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	331	1310	213	107	1032	154	681	165	219	45	161	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	331	1310	213	107	1032	154	681	165	219	45	161	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	331	1310	213	107	1032	154	681	165	219	45	161	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	331	1310	213	107	1032	154	681	165	219	45	161	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	331	1310	213	107	1032	154	681	165	219	45	161	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	331	1310	213	107	1032	154	681	165	219	45	161	46
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	1.00	0.97	1.00	1.00
Lanes:	1.00	1.71	0.29	1.00	2.00	1.00	1.00	0.43	0.57	1.10	0.70	0.20
Final Sat.:	1750	3182	517	1750	3800	1750	1800	773	1027	1926	1259	360
Capacity Analysis Module:												
Vol/Sat:	0.19	0.41	0.41	0.06	0.27	0.09	0.38	0.21	0.21	0.02	0.13	0.13
Crit Moves:	****			****			****			****		
Green Time:	23.2	49.2	49.2	7.3	33.3	78.5	45.2	45.2	45.2	15.3	15.3	15.3
Volume/Cap:	1.05	1.08	1.08	1.08	1.05	0.14	1.08	0.61	0.61	0.20	1.08	1.08
Delay/Veh:	95.9	75.3	75.3	148.1	73.9	8.2	80.4	26.7	26.7	39.0	117	116.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	75.3	75.3	148.1	73.9	8.2	80.4	26.7	26.7	39.0	117	116.8
DesignQueue:	20	65	11	7	59	4	35	8	11	3	11	3

Level Of Service Computation Report
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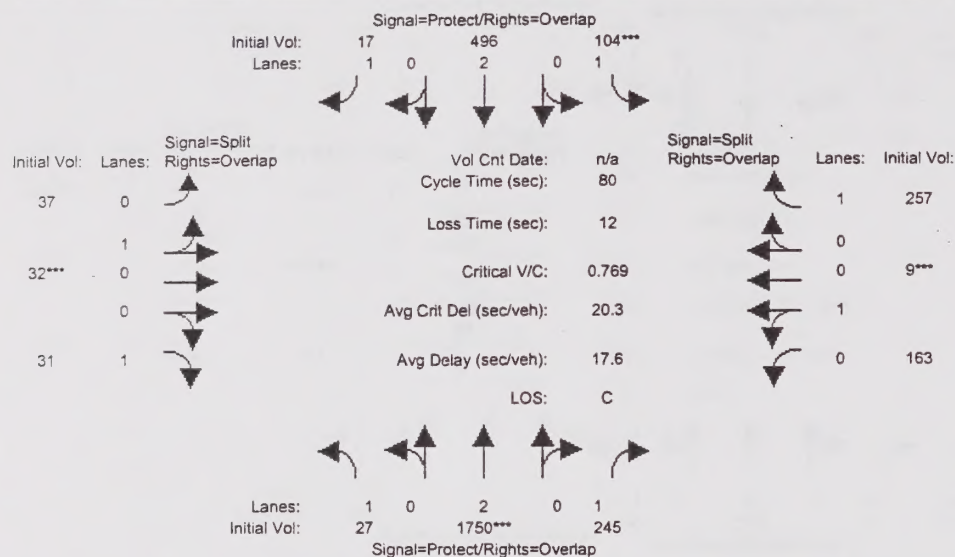
Intersection #2: Miller Ave. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	31	51	54	274	97	151	44	1061	51	93	1100	177
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	51	54	274	97	151	44	1061	51	93	1100	177
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	51	54	274	97	151	44	1061	51	93	1100	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	51	54	274	97	151	44	1061	51	93	1100	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	51	54	274	97	151	44	1061	51	93	1100	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	31	51	54	274	97	151	44	1061	51	93	1100	177
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	0.98	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.38	0.62	1.00	1.48	0.52	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	680	1120	1750	2622	928	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.03	0.10	0.10	0.09	0.03	0.28	0.03	0.05	0.29	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.6	10.6	10.6	28.2	28.2	28.2	29.2	29.2	29.2
Volume/Cap:	0.41	0.41	0.28	0.89	0.89	0.74	0.08	0.89	0.09	0.16	0.89	0.31
Delay/Veh:	29.1	29.1	28.1	44.3	44.3	37.8	16.5	28.6	16.6	16.5	28.0	17.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	29.1	28.1	44.3	44.3	37.8	16.5	28.6	16.6	16.5	28.0	17.4
DesignQueue:	1	2	2	12	4	7	2	39	2	3	40	6

Level Of Service Computation Report
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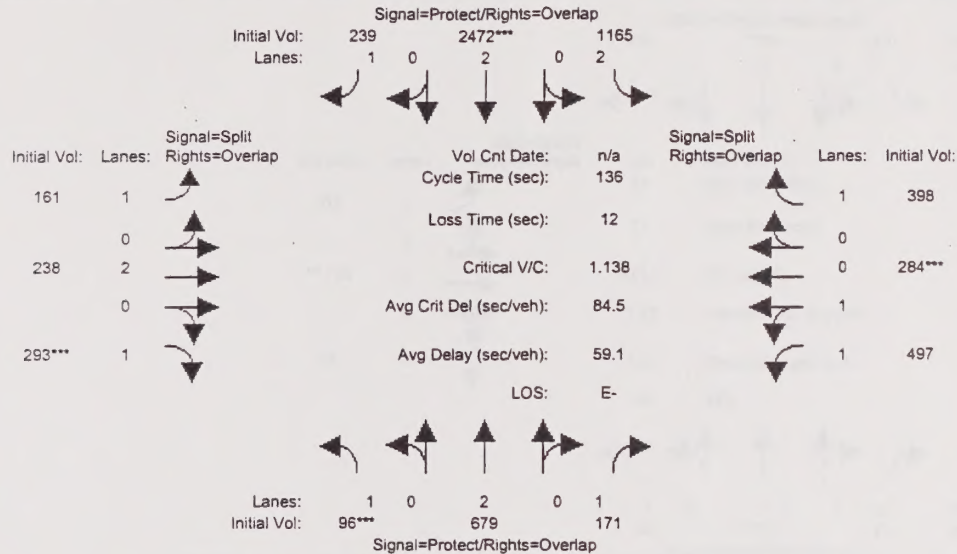
Intersection #3: Saratoga-Sunnyvale Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	27	1750	245	104	496	17	37	32	31	163	9	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	1750	245	104	496	17	37	32	31	163	9	257
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	1750	245	104	496	17	37	32	31	163	9	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	1750	245	104	496	17	37	32	31	163	9	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1750	245	104	496	17	37	32	31	163	9	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	1750	245	104	496	17	37	32	31	163	9	257
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.54	0.46	1.00	0.95	0.05	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	965	835	1750	1706	94	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.46	0.14	0.06	0.13	0.01	0.04	0.04	0.02	0.10	0.10	0.15
Crit Moves:	****			****			****			****		
Green Time:	7.0	41.0	51.0	7.0	41.0	51.0	10.0	10.0	17.0	10.0	10.0	17.0
Volume/Cap:	0.18	0.90	0.22	0.68	0.25	0.02	0.31	0.31	0.08	0.76	0.76	0.69
Delay/Veh:	25.8	17.8	4.7	34.6	8.3	4.0	24.5	24.5	19.2	35.4	35.4	25.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.8	17.8	4.7	34.6	8.3	4.0	24.5	24.5	19.2	35.4	35.4	25.8
DesignQueue:	1	43	4	4	11	0	1	1	1	6	0	9

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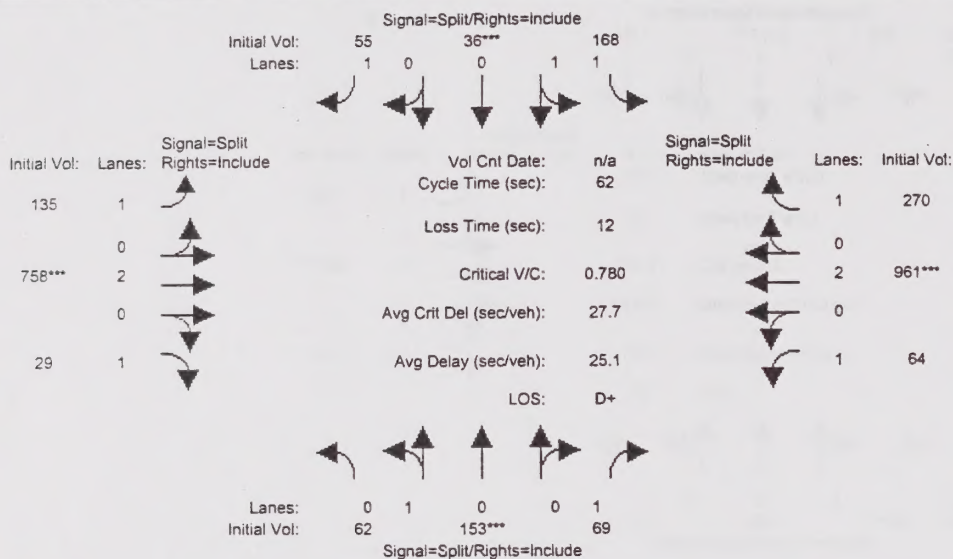
Intersection #1: Saratoga-Sunnyvale Rd. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	96	679	171	1165	2472	239	161	238	293	497	284	398
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	679	171	1165	2472	239	161	238	293	497	284	398
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	679	171	1165	2472	239	161	238	293	497	284	398
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	679	171	1165	2472	239	161	238	293	497	284	398
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	679	171	1165	2472	239	161	238	293	497	284	398
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	679	171	1165	2472	239	161	238	293	497	284	398
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.98	1.00	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.28	0.72	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	2259	1291	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.10	0.37	0.65	0.14	0.09	0.06	0.17	0.22	0.22	0.23
Crit Moves:	****			****					****			****
Green Time:	7.0	27.5	53.7	56.9	77.4	90.8	13.4	13.4	20.4	26.2	26.2	83.1
Volume/Cap:	1.07	0.88	0.25	0.88	1.14	0.20	0.93	0.64	1.12	1.14	1.14	0.37
Delay/Veh:	148.6	48.5	21.0	33.1	98.1	6.6	81.8	47.3	131.5	124.5	125	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.58	0.42	1.00	0.65	0.42	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	148.6	28.1	8.8	33.1	63.7	2.8	81.8	47.3	131.5	124.5	125	10.2
DesignQueue:	7	43	8	56	97	6	11	16	20	32	18	12

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Intersection #2: Miller Ave. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	62	153	69	168	36	55	135	758	29	64	961	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	153	69	168	36	55	135	758	29	64	961	270
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	153	69	168	36	55	135	758	29	64	961	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	153	69	168	36	55	135	758	29	64	961	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	153	69	168	36	55	135	758	29	64	961	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	62	153	69	168	36	55	135	758	29	64	961	270

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	0.98	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.29	0.71	1.00	1.65	0.35	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	519	1281	1750	2923	626	1750	1750	3800	1750	1750	3800	1750

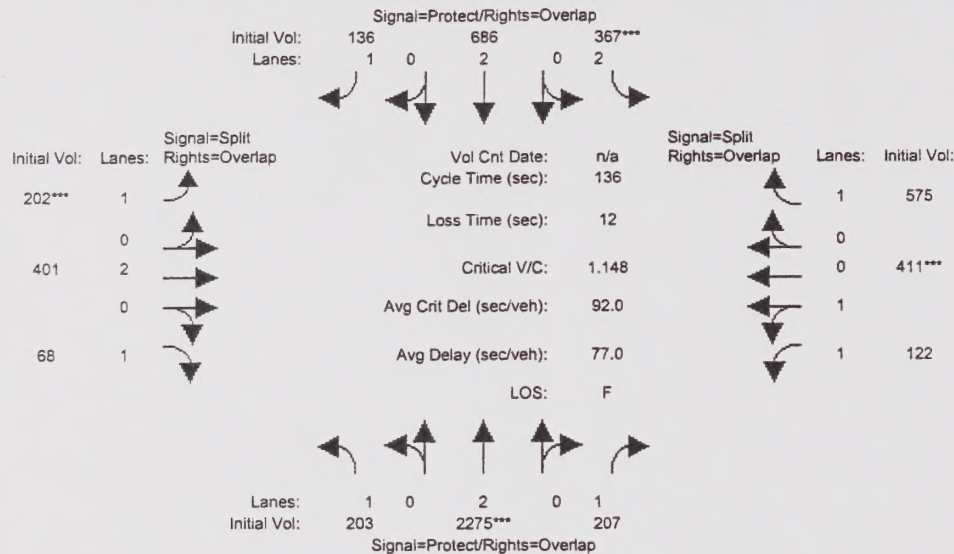
Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.04	0.06	0.06	0.03	0.08	0.20	0.02	0.04	0.25	0.15
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	13.2	13.2	13.2	16.8	16.8	16.8
Volume/Cap:	0.74	0.74	0.24	0.36	0.36	0.19	0.36	0.93	0.08	0.14	0.93	0.57
Delay/Veh:	25.4	25.4	17.3	17.8	17.8	17.2	16.1	31.1	14.8	13.0	27.7	16.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.4	25.4	17.3	17.8	17.8	17.2	16.1	31.1	14.8	13.0	27.7	16.1
DesignQueue:	2	5	2	5	1	2	4	22	1	2	26	7

**YEAR 2025 INTERSECTION LEVEL OF SERVICE
CALCULATION WORKSHEETS**

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

Intersection #1: Saratoga-Sunnyvale Rd. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	203	2275	207	367	686	136	202	401	68	122	411	575
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	203	2275	207	367	686	136	202	401	68	122	411	575
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	203	2275	207	367	686	136	202	401	68	122	411	575
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	203	2275	207	367	686	136	202	401	68	122	411	575
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	2275	207	367	686	136	202	401	68	122	411	575
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	203	2275	207	367	686	136	202	401	68	122	411	575

Saturation Flow Module:

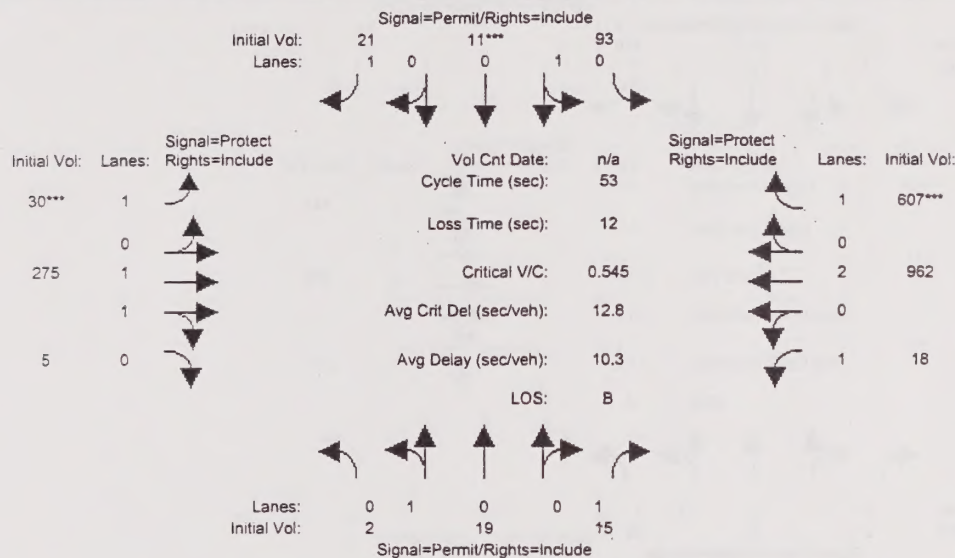
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	1750	1900	1750

Capacity Analysis Module:

Vol/Sat:	0.12	0.60	0.12	0.12	0.18	0.08	0.12	0.11	0.04	0.07	0.22	0.33
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	33.1	70.9	96.5	13.8	51.6	65.2	13.7	13.7	46.8	25.6	25.6	39.4
Volume/Cap:	0.48	1.15	0.17	1.15	0.48	0.16	1.15	1.05	0.11	0.37	1.15	1.13
Delay/Veh:	34.1	104	4.9	145.3	24.5	15.2	162.2	97.3	23.1	36.7	134	120.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.65	0.42	1.00	0.42	0.42	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	67.4	2.1	145.3	10.3	6.4	162.2	97.3	23.1	36.7	134	120.0
DesignQueue:	12	98	5	26	34	5	14	28	3	8	27	34

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

Intersection #16: Fruitvale Ave. Saratoga Los Gatos Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10

Volume Module:

Base Vol:	2	19	15	93	11	21	30	275	5	18	962	607
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	19	15	93	11	21	30	275	5	18	962	607
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	19	15	93	11	21	30	275	5	18	962	607
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	19	15	93	11	21	30	275	5	18	962	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	19	15	93	11	21	30	275	5	18	962	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	19	15	93	11	21	30	275	5	18	962	607

Saturation Flow Module:

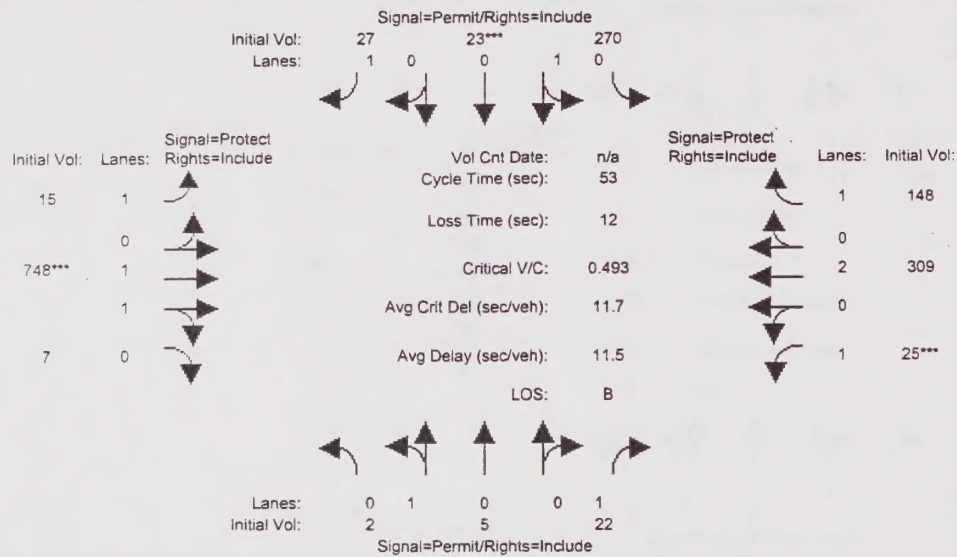
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	0.10	0.90	1.00	0.89	0.11	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:	171	1629	1750	1610	190	1750	1750	3634	66	1750	3800	1750

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.01	0.06	0.06	0.01	0.02	0.08	0.08	0.01	0.25	0.35
Crit Moves:				****			****					****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	7.0	18.2	18.2	12.8	24.0	24.0
Volume/Cap:	0.06	0.06	0.05	0.31	0.31	0.06	0.13	0.22	0.22	0.04	0.56	0.77
Delay/Veh:	13.4	13.4	13.4	14.2	14.2	13.4	15.5	9.4	9.4	11.7	8.4	12.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.4	13.4	13.4	14.2	14.2	13.4	15.5	9.4	9.4	11.7	8.4	12.4
DesignQueue:	0	0	0	2	0	1	1	5	0	0	17	11

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

Intersection #16: Fruitvale Ave. Saratoga Los Gatos Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10

Volume Module:

Base Vol:	2	5	22	270	23	27	15	748	7	25	309	148
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	5	22	270	23	27	15	748	7	25	309	148
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	5	22	270	23	27	15	748	7	25	309	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	5	22	270	23	27	15	748	7	25	309	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	5	22	270	23	27	15	748	7	25	309	148
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	5	22	270	23	27	15	748	7	25	309	148

Saturation Flow Module:

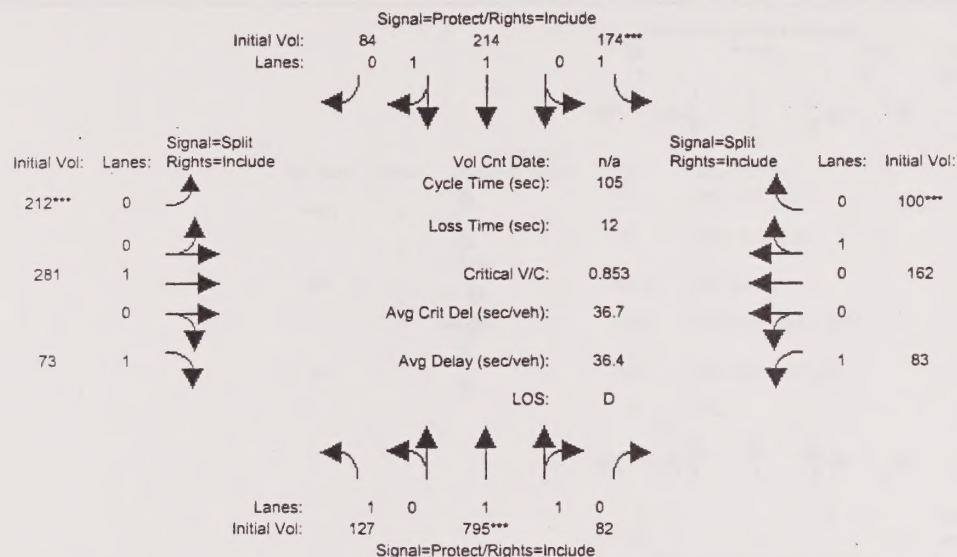
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.06	0.97
Lanes:	0.29	0.71	1.00	0.92	0.08	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	514	1286	1750	1659	141	1750	1750	3666	34	1750	3800	1750

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.01	0.16	0.16	0.02	0.01	0.20	0.20	0.01	0.08	0.08
Crit Moves:				****			****			****		
Green Time:	15.1	15.1	15.1	15.1	15.1	15.1	10.7	18.9	18.9	7.0	15.2	15.2
Volume/Cap:	0.01	0.01	0.04	0.57	0.57	0.05	0.04	0.57	0.57	0.11	0.28	0.29
Delay/Veh:	10.3	10.3	10.4	13.5	13.5	10.5	13.0	10.9	10.9	15.4	11.2	11.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.3	10.3	10.4	13.5	13.5	10.5	13.0	10.9	10.9	15.4	11.2	11.3
DesignQueue:	0	0	0	6	1	1	0	15	0	1	7	3

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

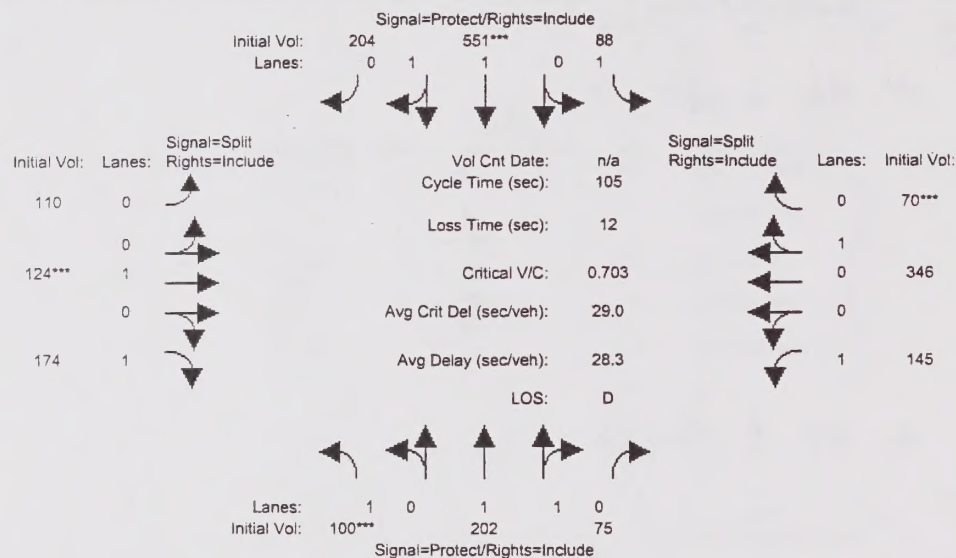
Intersection #15: Saratoga Sunnyvale Rd. Saratoga Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	127	795	82	174	214	84	212	281	73	83	162	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	127	795	82	174	214	84	212	281	73	83	162	100
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	795	82	174	214	84	212	281	73	83	162	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	127	795	82	174	214	84	212	281	73	83	162	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	795	82	174	214	84	212	281	73	83	162	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	127	795	82	174	214	84	212	281	73	83	162	100
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	1.00	1.00	0.97	0.97	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.42	0.58	0.43	0.57	1.00	1.00	0.62	0.38
Final Sat.:	1750	3354	346	1750	2656	1043	774	1026	1750	1750	1113	687
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.10	0.08	0.08	0.27	0.27	0.04	0.05	0.15	0.15
Crit Moves:	****			****			****					****
Green Time:	31.4	29.2	29.2	12.2	10.0	10.0	33.7	33.7	33.7	17.9	17.9	17.9
Volume/Cap:	0.24	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.13	0.28	0.85	0.85
Delay/Veh:	21.2	32.3	32.3	53.6	47.3	47.3	33.6	33.6	19.2	29.0	46.0	46.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.2	32.3	32.3	53.6	47.3	47.3	33.6	33.6	19.2	29.0	46.0	46.0
DesignQueue:	5	36	4	9	12	5	9	12	3	4	8	5

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

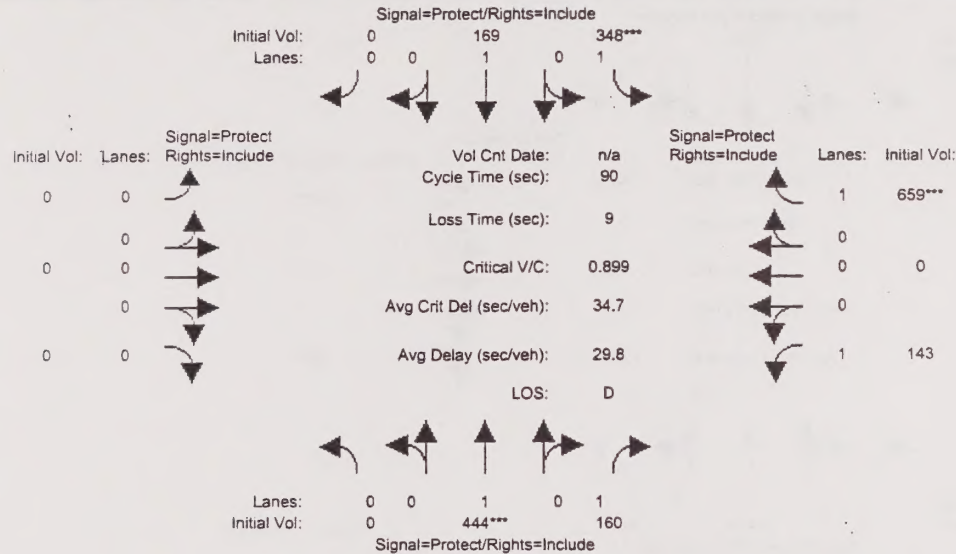
Intersection #15: Saratoga Sunnyvale Rd. Saratoga Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	100	202	75	88	551	204	110	124	174	145	346	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	202	75	88	551	204	110	124	174	145	346	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	202	75	88	551	204	110	124	174	145	346	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	202	75	88	551	204	110	124	174	145	346	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	202	75	88	551	204	110	124	174	145	346	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	100	202	75	88	551	204	110	124	174	145	346	70
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.04	1.00	0.97	1.04	1.00	1.00	1.00	0.97	0.97	1.00	1.00
Lanes:	1.00	1.44	0.56	1.00	1.44	0.56	0.47	0.53	1.00	1.00	0.83	0.17
Final Sat.:	1750	2697	1002	1750	2700	999	846	954	1750	1750	1497	303
Capacity Analysis Module:												
Vol/Sat:	0.06	0.07	0.07	0.05	0.20	0.20	0.13	0.13	0.10	0.08	0.23	0.23
Crit Moves:	****			****			****					****
Green Time:	8.5	23.0	23.0	16.1	30.5	30.5	19.4	19.4	19.4	34.5	34.5	34.5
Volume/Cap:	0.70	0.34	0.34	0.33	0.70	0.70	0.70	0.70	0.54	0.25	0.70	0.70
Delay/Veh:	45.3	26.4	26.4	30.4	26.7	26.7	34.9	34.9	30.8	19.6	26.0	26.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.3	26.4	26.4	30.4	26.7	26.7	34.9	34.9	30.8	19.6	26.0	26.0
DesignQueue:	5	9	3	4	24	9	5	6	8	6	14	3

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

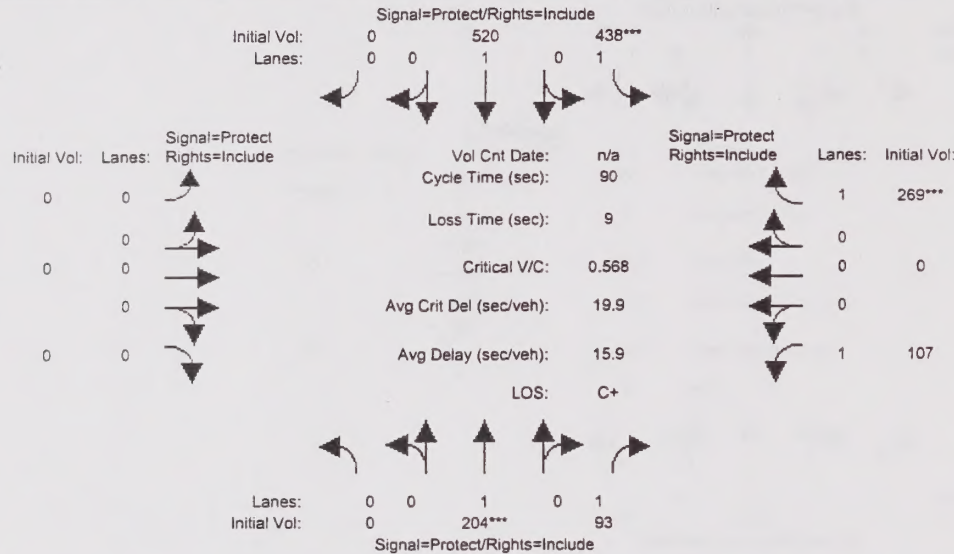
Intersection #14: Quito Rd. Pollard Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	444	160	348	169	0	0	0	0	143	0	659
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	444	160	348	169	0	0	0	0	143	0	659
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	444	160	348	169	0	0	0	0	143	0	659
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	444	160	348	169	0	0	0	0	143	0	659
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	444	160	348	169	0	0	0	0	143	0	659
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	444	160	348	169	0	0	0	0	143	0	659
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1900	1750	1750	1900	0	0	0	0	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.09	0.20	0.09	0.00	0.00	0.00	0.00	0.08	0.00	0.38
Crit Moves:	****			****								****
Green Time:	0.0	23.4	23.4	19.9	43.3	0.0	0.0	0.0	0.0	37.7	0.0	37.7
Volume/Cap:	0.00	0.90	0.35	0.90	0.18	0.00	0.00	0.00	0.00	0.20	0.00	0.90
Delay/Veh:	0.0	38.1	20.8	42.2	10.1	0.0	0.0	0.0	0.0	12.6	0.0	28.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	38.1	20.8	42.2	10.1	0.0	0.0	0.0	0.0	12.6	0.0	28.6
DesignQueue:	0	18	6	14	4	0	0	0	0	4	0	21

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Intersection #14: Quito Rd. Pollard Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	0	0	0

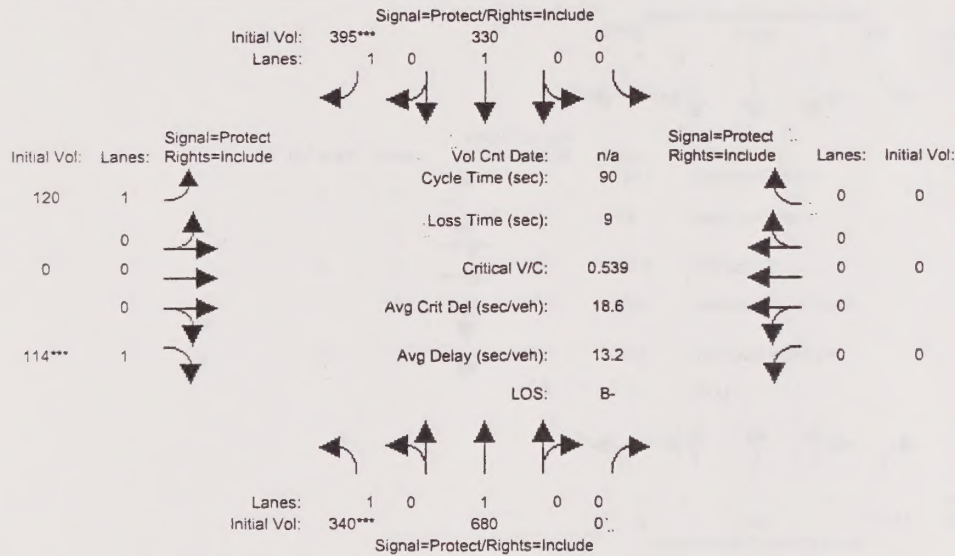
Volume Module:												
Base Vol:	0	204	93	438	520	0	0	0	0	107	0	269
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	204	93	438	520	0	0	0	0	107	0	269
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	204	93	438	520	0	0	0	0	107	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	204	93	438	520	0	0	0	0	107	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	204	93	438	520	0	0	0	0	107	0	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	204	93	438	520	0	0	0	0	107	0	269

Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1900	1750	1750	1900	0	0	0	0	1750	0	1750

Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.05	0.25	0.27	0.00	0.00	0.00	0.00	0.06	0.00	0.15
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	0.0	17.0	17.0	39.6	56.7	0.0	0.0	0.0	0.0	24.3	0.0	24.3
Volume/Cap:	0.00	0.57	0.28	0.57	0.43	0.00	0.00	0.00	0.00	0.23	0.00	0.57
Delay/Veh:	0.0	26.8	23.9	15.0	6.6	0.0	0.0	0.0	0.0	19.4	0.0	22.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.8	23.9	15.0	6.6	0.0	0.0	0.0	0.0	19.4	0.0	22.7
DesignQueue:	0	9	4	13	10	0	0	0	0	4	0	10

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Intersection #13: Quito Rd. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0

Volume Module:

Base Vol:	340	680	0	0	330	395	120	0	114	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	680	0	0	330	395	120	0	114	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	340	680	0	0	330	395	120	0	114	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	680	0	0	330	395	120	0	114	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	680	0	0	330	395	120	0	114	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	340	680	0	0	330	395	120	0	114	0	0	0

Saturation Flow Module:

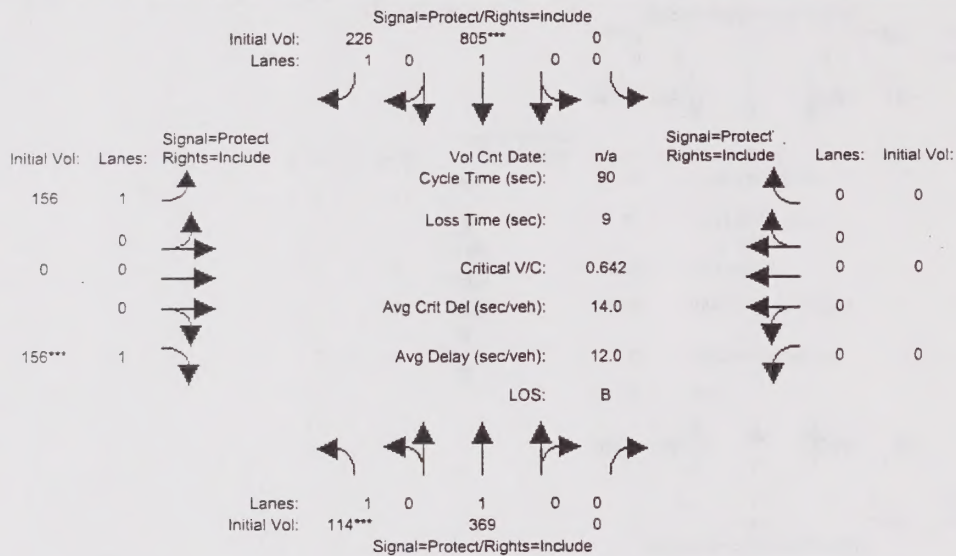
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.19	0.36	0.00	0.00	0.17	0.23	0.07	0.00	0.07	0.00	0.00	0.00
Crit Moves:	****					****			****			
Green Time:	32.4	70.1	0.0	0.0	37.7	37.7	10.9	0.0	10.9	0.0	0.0	0.0
Volume/Cap:	0.54	0.46	0.00	0.00	0.41	0.54	0.57	0.00	0.54	0.00	0.00	0.00
Delay/Veh:	18.1	2.8	0.0	0.0	14.2	15.6	31.0	0.0	30.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.1	2.8	0.0	0.0	14.2	15.6	31.0	0.0	30.4	0.0	0.0	0.0
DesignQueue:	11	8	0	0	10	12	5	0	5	0	0	0

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Intersection #13: Quito Rd. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	7	0	10	0	0	0

Volume Module:

Base Vol:	114	369	0	0	805	226	156	0	156	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	369	0	0	805	226	156	0	156	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	369	0	0	805	226	156	0	156	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	369	0	0	805	226	156	0	156	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	369	0	0	805	226	156	0	156	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	114	369	0	0	805	226	156	0	156	0	0	0

Saturation Flow Module:

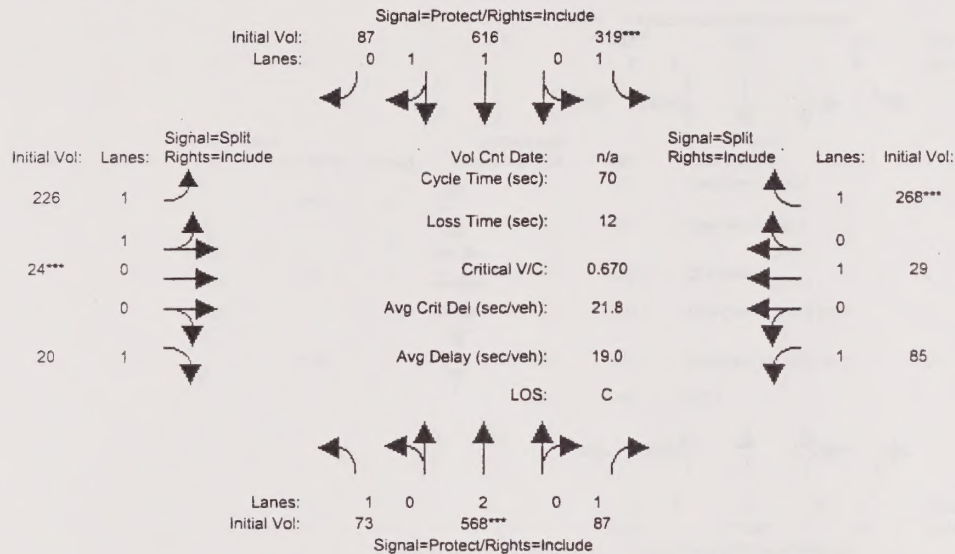
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.19	0.00	0.00	0.42	0.13	0.09	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	9.1	68.5	0.0	0.0	59.4	59.4	12.5	0.0	12.5	0.0	0.0	0.0
Volume/Cap:	0.64	0.26	0.00	0.00	0.64	0.20	0.64	0.00	0.64	0.00	0.00	0.00
Delay/Veh:	34.8	2.4	0.0	0.0	7.7	4.6	31.8	0.0	31.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.8	2.4	0.0	0.0	7.7	4.6	31.8	0.0	31.8	0.0	0.0	0.0
DesignQueue:	5	5	0	0	15	4	7	0	7	0	0	0

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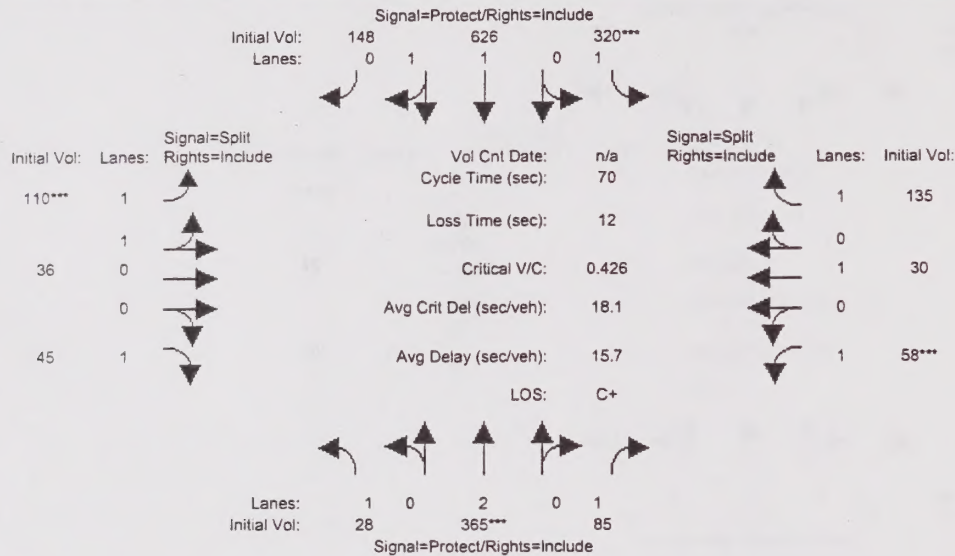
Intersection #12: Fruitvale Ave. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	73	568	87	319	616	87	226	24	20	85	29	268
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	568	87	319	616	87	226	24	20	85	29	268
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	568	87	319	616	87	226	24	20	85	29	268
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	568	87	319	616	87	226	24	20	85	29	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	568	87	319	616	87	226	24	20	85	29	268
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	73	568	87	319	616	87	226	24	20	85	29	268
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.03	1.00	0.98	1.00	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.75	0.25	1.81	0.19	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3242	458	3209	341	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.05	0.18	0.19	0.19	0.07	0.07	0.01	0.05	0.02	0.15
Crit Moves:	****			****			****					****
Green Time:	7.0	14.8	14.8	18.0	25.8	25.8	10.0	10.0	10.0	15.2	15.2	15.2
Volume/Cap:	0.42	0.71	0.24	0.71	0.51	0.51	0.49	0.49	0.08	0.22	0.07	0.71
Delay/Veh:	23.4	21.5	17.5	21.4	13.4	13.4	21.7	21.7	19.8	17.2	16.6	23.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.4	21.5	17.5	21.4	13.4	13.4	21.7	21.7	19.8	17.2	16.6	23.4
DesignQueue:	3	18	3	10	16	2	8	1	1	3	1	8

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Intersection #12: Fruitvale Ave. Allendale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	28	365	85	320	626	148	110	36	45	58	30	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	365	85	320	626	148	110	36	45	58	30	135
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	365	85	320	626	148	110	36	45	58	30	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	365	85	320	626	148	110	36	45	58	30	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	365	85	320	626	148	110	36	45	58	30	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	365	85	320	626	148	110	36	45	58	30	135

Saturation Flow Module:

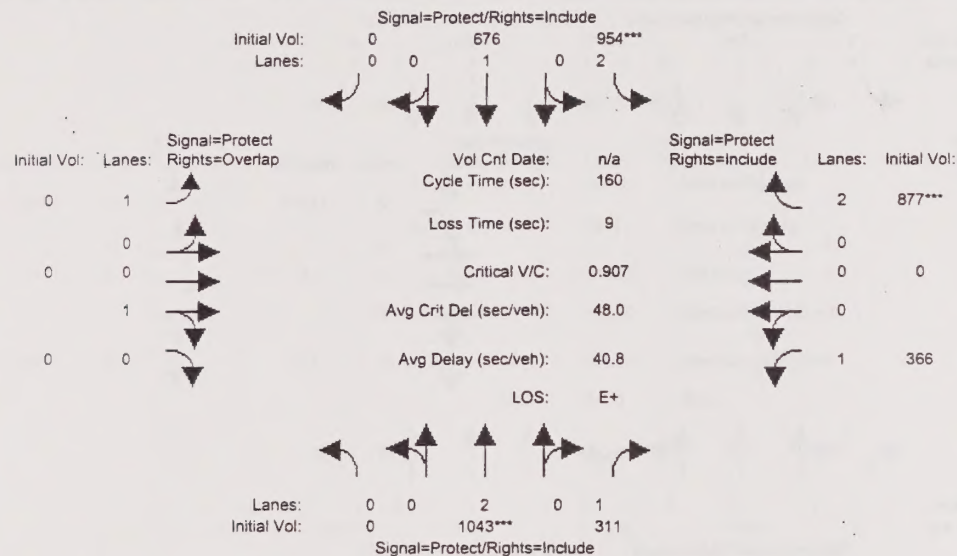
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.03	1.00	0.98	1.00	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	1.00	1.61	0.39	1.51	0.49	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2992	707	2674	875	1750	1750	1900	1750

Capacity Analysis Module:

Vol/Sat:	0.02	0.10	0.05	0.18	0.21	0.21	0.04	0.04	0.03	0.03	0.02	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	7.0	12.9	12.9	24.7	30.6	30.6	10.0	10.0	10.0	10.4	10.4	10.4
Volume/Cap:	0.16	0.52	0.26	0.52	0.48	0.48	0.29	0.29	0.18	0.22	0.11	0.52
Delay/Veh:	21.9	20.1	18.7	14.3	10.8	10.8	20.5	20.5	20.1	20.0	19.6	22.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.9	20.1	18.7	14.3	10.8	10.8	20.5	20.5	20.1	20.0	19.6	22.4
DesignQueue:	1	12	3	8	14	3	4	1	2	2	1	5

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1985 HCM Operations (Future Volume Alternative)
AM Peak

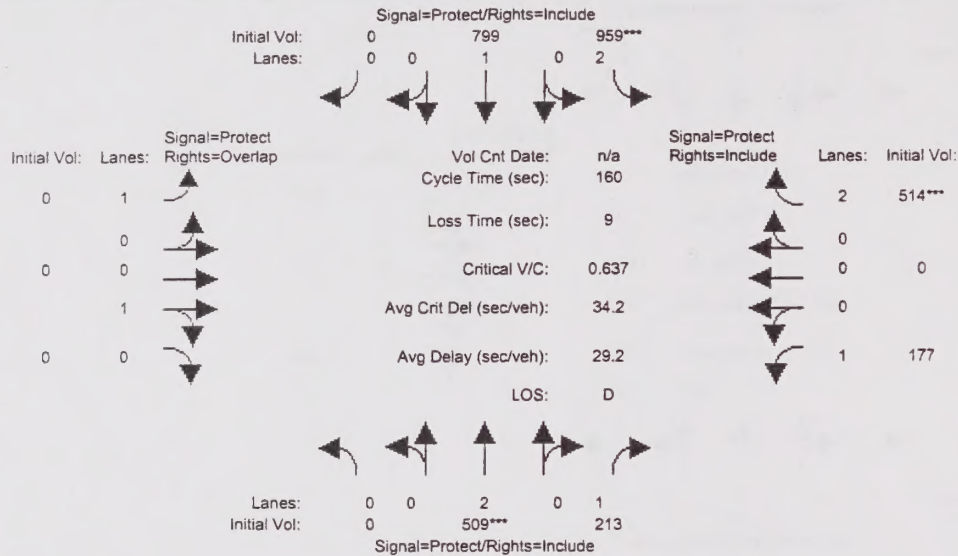
Intersection #11: Saratoga Ave. Fruitvale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Volume Module:												
Base Vol:	0	1043	311	954	676	0	0	0	0	366	0	877
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1043	311	954	676	0	0	0	0	366	0	877
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1043	311	954	676	0	0	0	0	366	0	877
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1043	311	954	676	0	0	0	0	366	0	877
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1043	311	954	676	0	0	0	0	366	0	877
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1043	311	954	676	0	0	0	0	366	0	877
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.88
Lanes:	0.00	2.00	1.00	2.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3800	1750	3150	1900	0	1750	1800	0	1750	0	3150
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.18	0.30	0.36	0.00	0.00	0.00	0.00	0.21	0.00	0.28
Crit Moves:	****			****								****
Green Time:	0.0	48.4	48.4	53.4	102	0.0	0.0	0.0	0.0	49.1	0.0	49.1
Volume/Cap:	0.00	0.91	0.59	0.91	0.56	0.00	0.00	0.00	0.00	0.68	0.00	0.91
Delay/Veh:	0.0	48.2	37.2	46.7	12.9	0.0	0.0	0.0	0.0	39.4	0.0	49.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	48.2	37.2	46.7	12.9	0.0	0.0	0.0	0.0	39.4	0.0	49.1
DesignQueue:	0	70	20	60	24	0	0	0	0	24	0	58

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

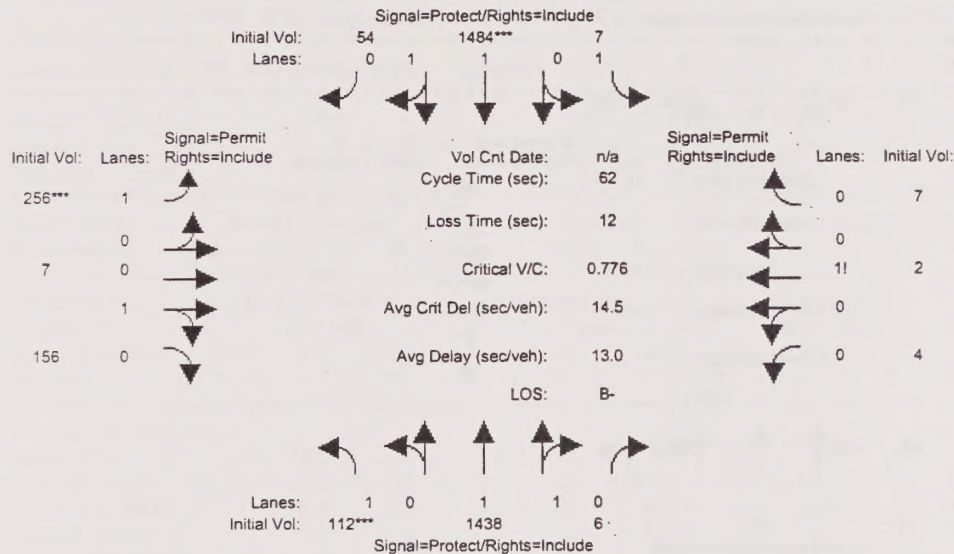
Intersection #11: Saratoga Ave. Fruitvale Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Volume Module:												
Base Vol:	0	509	213	959	799	0	0	0	0	177	0	514
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	509	213	959	799	0	0	0	0	177	0	514
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	509	213	959	799	0	0	0	0	177	0	514
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	509	213	959	799	0	0	0	0	177	0	514
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	509	213	959	799	0	0	0	0	177	0	514
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol..	0	509	213	959	799	0	0	0	0	177	0	514
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.00	1.00	0.97	1.06	0.88
Lanes:	0.00	2.00	1.00	2.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	2.00
Final Sat..	0	3800	1750	3150	1900	0	1750	1800	0	1750	0	3150
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.12	0.30	0.42	0.00	0.00	0.00	0.00	0.10	0.00	0.16
Crit Moves:	****			****								****
Green Time:	0.0	33.6	33.6	76.4	110	0.0	0.0	0.0	0.0	41.0	0.0	41.0
Volume/Cap:	0.00	0.64	0.58	0.64	0.61	0.00	0.00	0.00	0.00	0.40	0.00	0.64
Delay/Veh:	0.0	45.0	44.9	24.5	10.8	0.0	0.0	0.0	0.0	37.8	0.0	41.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	45.0	44.9	24.5	10.8	0.0	0.0	0.0	0.0	37.8	0.0	41.4
DesignQueue:	0	37	15	48	25	0	0	0	0	12	0	35

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

Intersection #10: Saratoga Ave. Scotland Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	112	1438	6	7	1484	54	256	7	156	4	2	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	1438	6	7	1484	54	256	7	156	4	2	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	1438	6	7	1484	54	256	7	156	4	2	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	1438	6	7	1484	54	256	7	156	4	2	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	1438	6	7	1484	54	256	7	156	4	2	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	112	1438	6	7	1484	54	256	7	156	4	2	7

Saturation Flow Module:

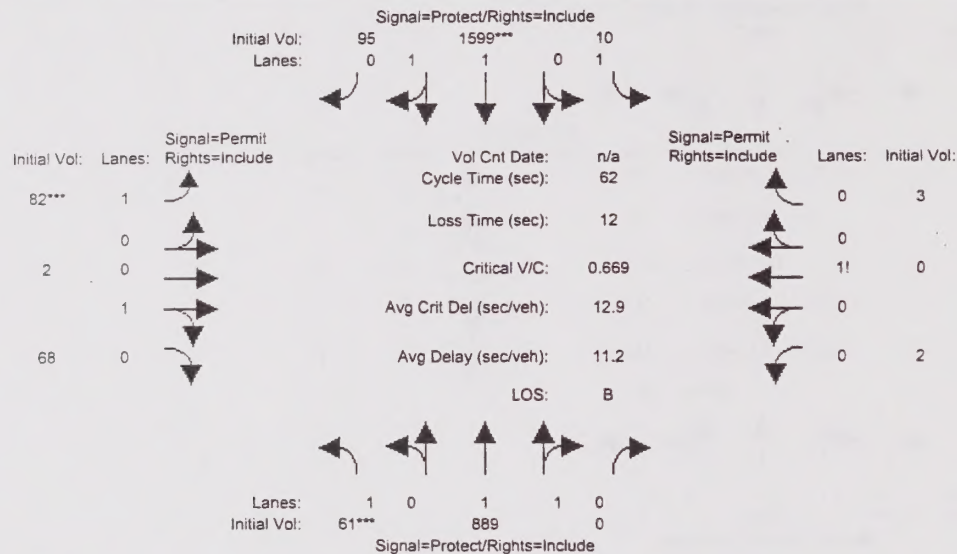
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.03	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.93	0.07	1.00	0.04	0.96	0.31	0.15	0.54
Final Sat.:	1750	3685	15	1750	3570	130	1750	77	1723	538	269	942

Capacity Analysis Module:

Vol/Sat:	0.06	0.39	0.39	0.00	0.42	0.42	0.15	0.09	0.09	0.01	0.01	0.01
Crit Moves:	****			****			****					
Green Time:	7.0	31.8	31.8	7.0	31.8	31.8	11.2	11.2	11.2	11.2	11.2	11.2
Volume/Cap:	0.57	0.76	0.76	0.04	0.81	0.81	0.81	0.50	0.50	0.04	0.04	0.04
Delay/Veh:	22.6	10.5	10.5	18.6	11.5	11.5	28.5	18.4	18.4	15.9	15.9	15.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.6	10.5	10.5	18.6	11.5	11.5	28.5	18.4	18.4	15.9	15.9	15.9
DesignQueue:	3	27	0	0	28	1	7	0	5	0	0	0

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

Intersection #10: Saratoga Ave. Scotland Dr.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	7	10	10	10	10	10	10	0	10

Volume Module:

Base Vol:	61	889	0	10	1599	95	82	2	68	2	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	889	0	10	1599	95	82	2	68	2	0	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	889	0	10	1599	95	82	2	68	2	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	889	0	10	1599	95	82	2	68	2	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	889	0	10	1599	95	82	2	68	2	0	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	61	889	0	10	1599	95	82	2	68	2	0	3

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	0.97	0.97	1.03	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	2.00	0.00	1.00	1.88	0.12	1.00	0.03	0.97	0.40	0.00	0.60
Final Sat.:	1750	3700	0	1750	3492	207	1750	51	1749	700	0	1050

Capacity Analysis Module:

Vol/Sat:	0.03	0.24	0.00	0.01	0.46	0.46	0.05	0.04	0.04	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green Time:	7.0	33.0	0.0	7.0	33.0	33.0	10.0	10.0	10.0	10.0	0.0	10.0
Volume/Cap:	0.31	0.45	0.00	0.05	0.86	0.86	0.29	0.24	0.24	0.02	0.00	0.02
Delay/Veh:	19.5	6.9	0.0	18.6	12.5	12.5	17.6	17.3	17.3	16.6	0.0	16.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjPctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.5	6.9	0.0	18.6	12.5	12.5	17.6	17.3	17.3	16.6	0.0	16.6
DesignQueue:	2	15	0	0	29	2	2	0	2	0	0	0

Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #9 Saratoga Ave. Dagmar Dr.

Cycle (sec): 50 Critical Vol./Cap. (X): 0.666
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.5
Optimal Cycle: 41 Level Of Service: C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Lanes:	0	0	1	1	0	0	1	0	2	0	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	1744	32	46	1365	0	0	0	0	70	0	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1744	32	46	1365	0	0	0	0	70	0	114
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1744	32	46	1365	0	0	0	0	70	0	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1744	32	46	1365	0	0	0	0	70	0	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1744	32	46	1365	0	0	0	0	70	0	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1744	32	46	1365	0	0	0	0	70	0	114

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3633	67	1750	3800	0	0	0	0	1750	0	1750

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.48	0.48	0.03	0.36	0.00	0.00	0.00	0.00	0.04	0.00	0.07
Crit Moves:	****			****			****			****		
Green Time:	0.0	24.0	24.0	7.0	31.0	0.0	0.0	0.0	0.0	10.0	0.0	17.0
Volume/Cap:	0.00	1.00	1.00	0.19	0.58	0.00	0.00	0.00	0.00	0.20	0.00	0.19
Delay/Veh:	0.0	26.3	26.3	14.5	4.6	0.0	0.0	0.0	0.0	12.7	0.0	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.3	26.3	14.5	4.6	0.0	0.0	0.0	0.0	12.7	0.0	8.9
DesignQueue:	0	29	1	1	16	0	0	0	0	2	0	2

Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #9 Saratoga Ave. Dagmar Dr.

Cycle (sec): 45 Critical Vol./Cap. (X): 0.598
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 36 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	1	0	0 0 1

Volume Module:

Base Vol:	0	984	18	100	1793	0	0	0	0	12	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	984	18	100	1793	0	0	0	0	12	0	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	984	18	100	1793	0	0	0	0	12	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	984	18	100	1793	0	0	0	0	12	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	984	18	100	1793	0	0	0	0	12	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	984	18	100	1793	0	0	0	0	12	0	47

Saturation Flow Module:

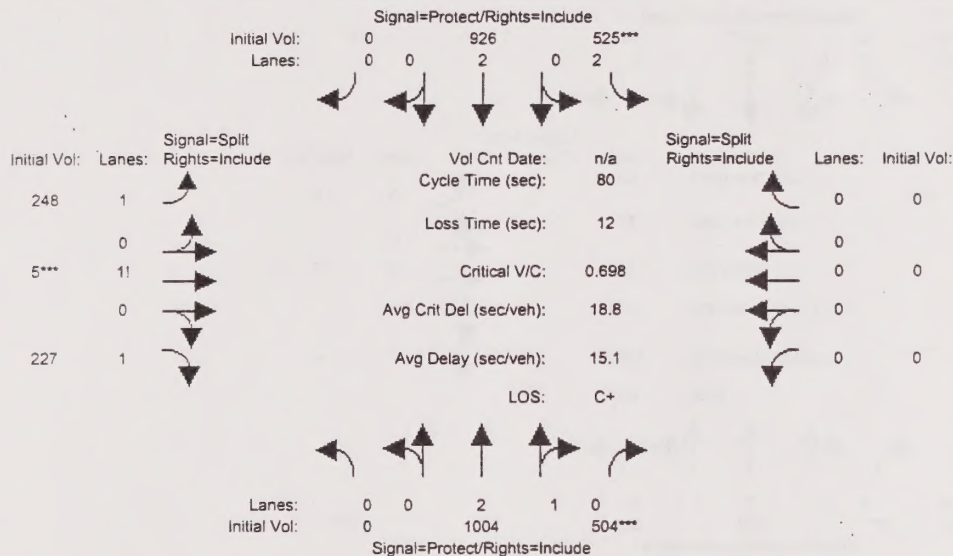
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.00	1.96	0.04	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3633	66	1750	3800	0	0	0	0	1750	0	1750

Capacity Analysis Module:

Vol/Sat:	0.00	0.27	0.27	0.06	0.47	0.00	0.00	0.00	0.00	0.01	0.00	0.03
Crit Moves:	****			****						****		
Green Time:	0.0	19.0	19.0	7.0	26.0	0.0	0.0	0.0	0.0	10.0	0.0	17.0
Volume/Cap:	0.00	0.64	0.64	0.37	0.82	0.00	0.00	0.00	0.00	0.03	0.00	0.07
Delay/Veh:	0.0	8.5	8.5	13.3	7.6	0.0	0.0	0.0	0.0	10.4	0.0	6.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.5	8.5	13.3	7.6	0.0	0.0	0.0	0.0	10.4	0.0	6.8
DesignQueue:	0	15	0	2	22	0	0	0	0	0	0	1

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

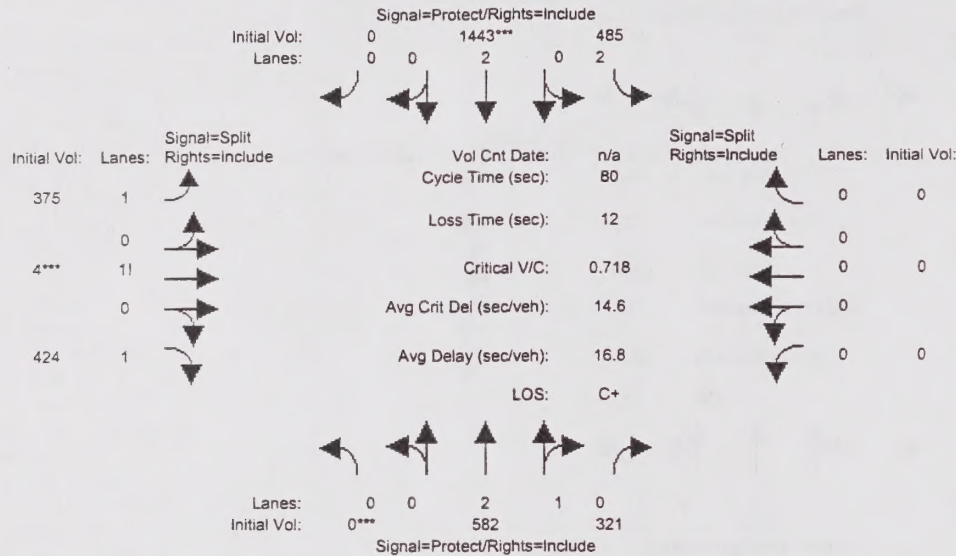
Intersection #8: Saratoga Ave. SB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Volume Module:												
Base Vol:	0	1004	504	525	926	0	248	5	227	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1004	504	525	926	0	248	5	227	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1004	504	525	926	0	248	5	227	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1004	504	525	926	0	248	5	227	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1004	504	525	926	0	248	5	227	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1004	504	525	926	0	248	5	227	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	0.97	0.97	0.97	1.06	0.97
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.51	0.02	1.47	0.00	0.00	0.00
Final Sat.:	0	3800	1750	3150	3800	0	2645	36	2569	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.29	0.17	0.24	0.00	0.09	0.14	0.09	0.00	0.00	0.00
Crit Moves:	*****											
Green Time:	0.0	33.0	33.0	19.1	52.1	0.0	15.9	15.9	15.9	0.0	0.0	0.0
Volume/Cap:	0.00	0.64	0.70	0.70	0.37	0.00	0.47	0.70	0.45	0.00	0.00	0.00
Delay/Veh:	0.0	14.7	15.4	23.1	4.9	0.0	21.8	24.8	21.6	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.7	15.4	23.1	4.9	0.0	21.8	24.8	21.6	0.0	0.0	0.0
DesignQueue:	0	28	14	18	15	0	9	0	8	0	0	0

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
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Intersection #8: Saratoga Ave. SB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0

Volume Module:

Base Vol:	0	582	321	485	1443	0	375	4	424	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	582	321	485	1443	0	375	4	424	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	582	321	485	1443	0	375	4	424	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	582	321	485	1443	0	375	4	424	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	582	321	485	1443	0	375	4	424	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	582	321	485	1443	0	375	4	424	0	0	0

Saturation Flow Module:

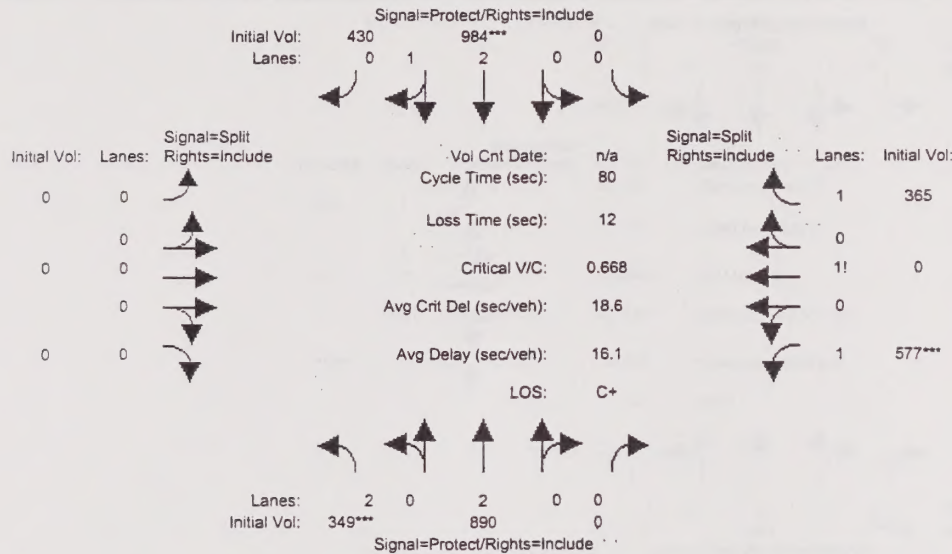
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	0.97	0.97	0.97	1.06	0.97
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.46	0.01	1.53	0.00	0.00	0.00
Final Sat.:	0	3800	1750	3150	3800	0	2563	17	2669	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.18	0.15	0.38	0.00	0.15	0.23	0.16	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green Time:	0.0	23.0	23.0	19.3	42.3	0.0	25.7	25.7	25.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.53	0.64	0.64	0.72	0.00	0.46	0.72	0.49	0.00	0.00	0.00
Delay/Veh:	0.0	18.5	19.6	22.0	11.8	0.0	16.5	19.8	16.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.5	19.6	22.0	11.8	0.0	16.5	19.8	16.9	0.0	0.0	0.0
DesignQueue:	0	19	11	17	34	0	12	0	13	0	0	0

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

Intersection #7: Saratoga Ave. NB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	7	0	10

Volume Module:

Base Vol:	349	890	0	0	984	430	0	0	0	577	0	365
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	349	890	0	0	984	430	0	0	0	577	0	365
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	349	890	0	0	984	430	0	0	0	577	0	365
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	349	890	0	0	984	430	0	0	0	577	0	365
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	349	890	0	0	984	430	0	0	0	577	0	365
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	349	890	0	0	984	430	0	0	0	577	0	365

Saturation Flow Module:

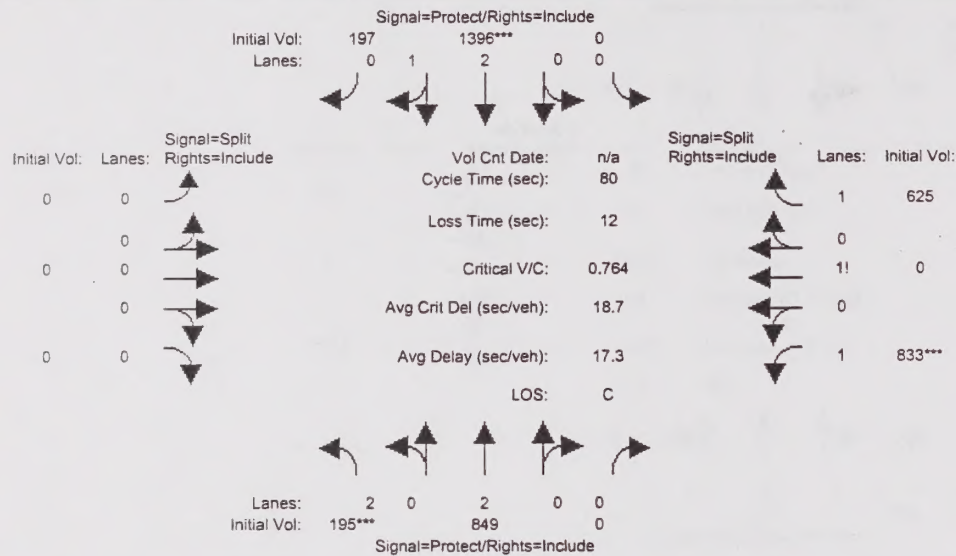
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.05	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	2.00	2.00	0.00	0.00	2.05	0.95	0.00	0.00	0.00	1.61	0.00	1.39
Final Sat.:	3150	3800	0	0	3895	1702	0	0	0	2822	0	2428

Capacity Analysis Module:

Vol/Sat:	0.11	0.23	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.20	0.00	0.15
Crit Moves:	****				****					****		
Green Time:	13.3	43.5	0.0	0.0	30.3	30.3	0.0	0.0	0.0	24.5	0.0	24.5
Volume/Cap:	0.67	0.43	0.00	0.00	0.67	0.67	0.00	0.00	0.00	0.67	0.00	0.49
Delay/Veh:	26.1	8.3	0.0	0.0	16.3	16.3	0.0	0.0	0.0	19.3	0.0	17.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	8.3	0.0	0.0	16.3	16.3	0.0	0.0	0.0	19.3	0.0	17.4
DesignQueue:	13	19	0	0	29	13	0	0	0	19	0	12

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

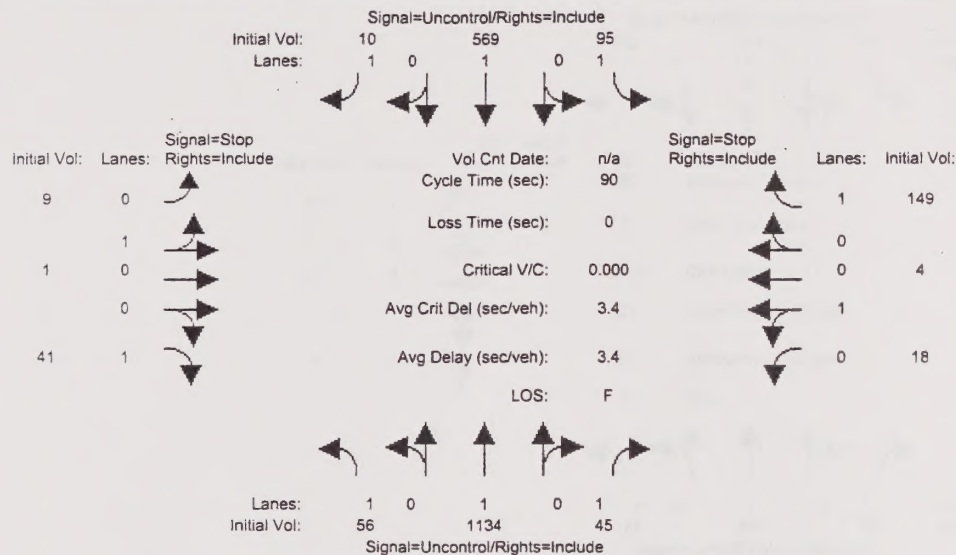
Intersection #7: Saratoga Ave. NB SR-85.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	7	0	10
Volume Module:												
Base Vol:	195	849	0	0	1396	197	0	0	0	833	0	625
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	849	0	0	1396	197	0	0	0	833	0	625
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	849	0	0	1396	197	0	0	0	833	0	625
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	849	0	0	1396	197	0	0	0	833	0	625
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	849	0	0	1396	197	0	0	0	833	0	625
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	195	849	0	0	1396	197	0	0	0	833	0	625
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.88	1.06	0.97	0.97	1.04	1.00	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	2.00	2.00	0.00	0.00	2.62	0.38	0.00	0.00	0.00	1.57	0.00	1.43
Final Sat.:	3150	3800	0	0	4907	692	0	0	0	2750	0	2500
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.30	0.00	0.25
Crit Moves:	****			****						****		
Green Time:	7.0	36.5	0.0	0.0	29.5	29.5	0.0	0.0	0.0	31.5	0.0	31.5
Volume/Cap:	0.71	0.49	0.00	0.00	0.77	0.77	0.00	0.00	0.00	0.77	0.00	0.64
Delay/Veh:	32.5	11.7	0.0	0.0	18.2	18.2	0.0	0.0	0.0	17.5	0.0	15.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjPctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.5	11.7	0.0	0.0	18.2	18.2	0.0	0.0	0.0	17.5	0.0	15.3
DesignQueue:	8	22	0	0	42	6	0	0	0	24	0	18

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
AM Peak

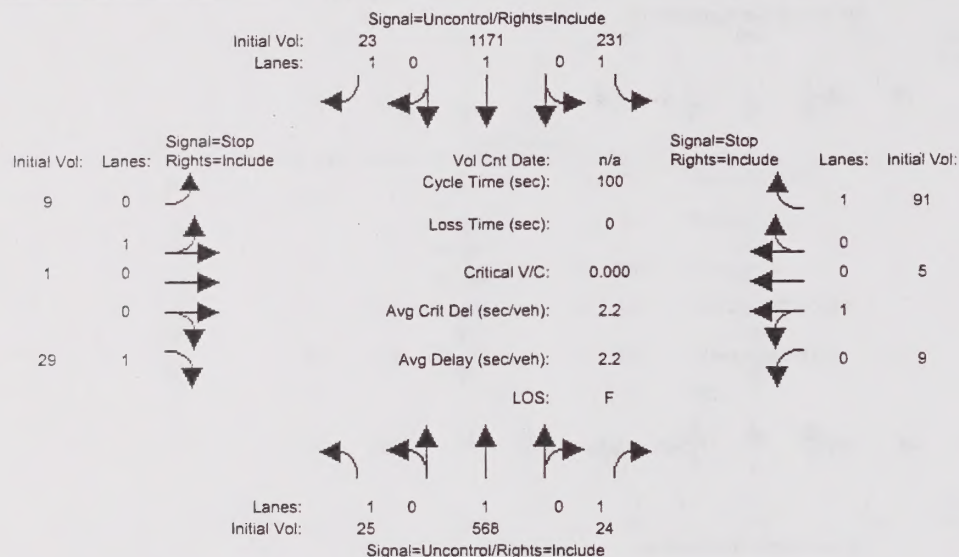
Intersection #6: Quito Rd. McCoy Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	56	1134	45	95	569	10	9	1	41	18	4	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	1134	45	95	569	10	9	1	41	18	4	149
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1134	45	95	569	10	9	1	41	18	4	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	1134	45	95	569	10	9	1	41	18	4	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	56	1134	45	95	569	10	9	1	41	18	4	149
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	62	1134	45	105	569	10	10	1	45	20	4	164
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx	3.4	3.3	2.6	3.4	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxxx	5.0	xxxx	xxxxxx	6.5	6.0	5.5	6.5	6.0	5.5
Capacity Module:												
Cnflct Vol:	579	xxxx	xxxxxx	1179	xxxx	xxxxxx	1931	1899	569	1875	1864	1134
Potent Cap.:	908	xxxx	xxxxxx	470	xxxx	xxxxxx	81	110	713	87	115	369
Adj Cap:	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx	0.42	0.72	1.00	0.73	0.72	1.00
Move Cap.:	908	xxxx	xxxxxx	470	xxxx	xxxxxx	34	80	713	63	83	369
Level Of Service Module:												
Stopped Del:	4.2	xxxx	xxxxxx	9.6	xxxx	xxxxxx	143.2	45.7	5.4	78.8	45.5	16.3
LOS by Move:	A	*	*	B	*	*	*	*	B	*	*	C
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	36	xxxx	xxxxxx	66	xxxx	xxxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	133.5	xxxx	xxxxxx	72.7	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	0.2			1.5			30.5			23.6		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
PM Peak

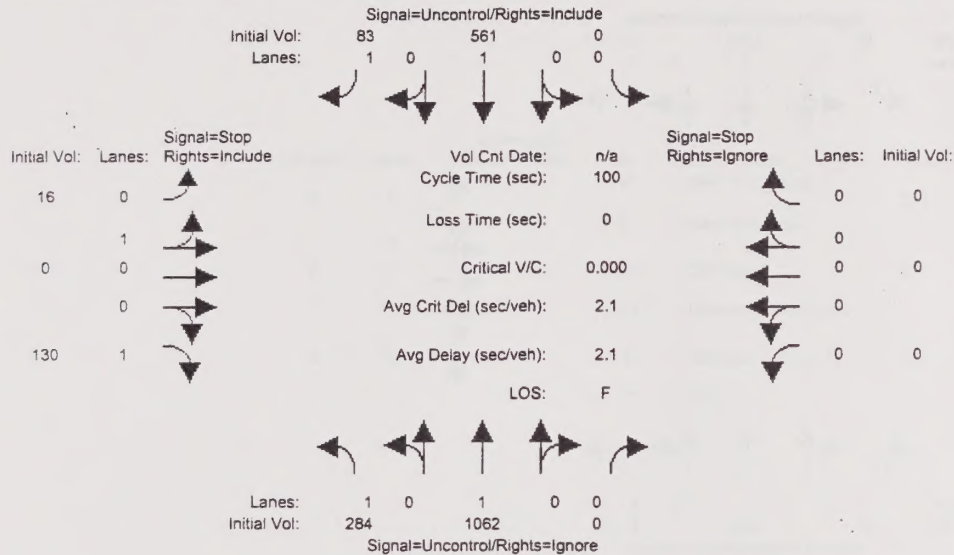
Intersection #6: Quito Rd. McCoy Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	25	568	24	231	1171	23	9	1	29	9	5	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	568	24	231	1171	23	9	1	29	9	5	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	568	24	231	1171	23	9	1	29	9	5	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	568	24	231	1171	23	9	1	29	9	5	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	25	568	24	231	1171	23	9	1	29	9	5	91
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	28	568	24	254	1171	23	10	1	32	10	6	100
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	3.3	2.6	3.4	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxx	5.0	xxxx	xxxxx	6.5	6.0	5.5	6.5	6.0	5.5
Capacity Module:												
Cnflict Vol:	1194	xxxx	xxxxx	592	xxxx	xxxxx	2043	2019	1171	2010	2018	568
Potent Cap.:	463	xxxx	xxxxx	895	xxxx	xxxxx	69	95	353	73	95	714
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.60	0.67	1.00	0.67	0.67	1.00
Move Cap.:	463	xxxx	xxxxx	895	xxxx	xxxxx	42	64	353	49	64	714
Level Of Service Module:												
Stopped Del:	8.2	xxxx	xxxxx	5.4	xxxx	xxxxx	109.2	57.1	11.1	90.4	60.8	5.8
LOS by Move:	B	*	*	B	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	43	xxxx	xxxxx	53	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	104.0	xxxx	xxxxx	79.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	F	*	*
ApproachDel:	0.4			1.0			34.9			15.7		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
AM Peak

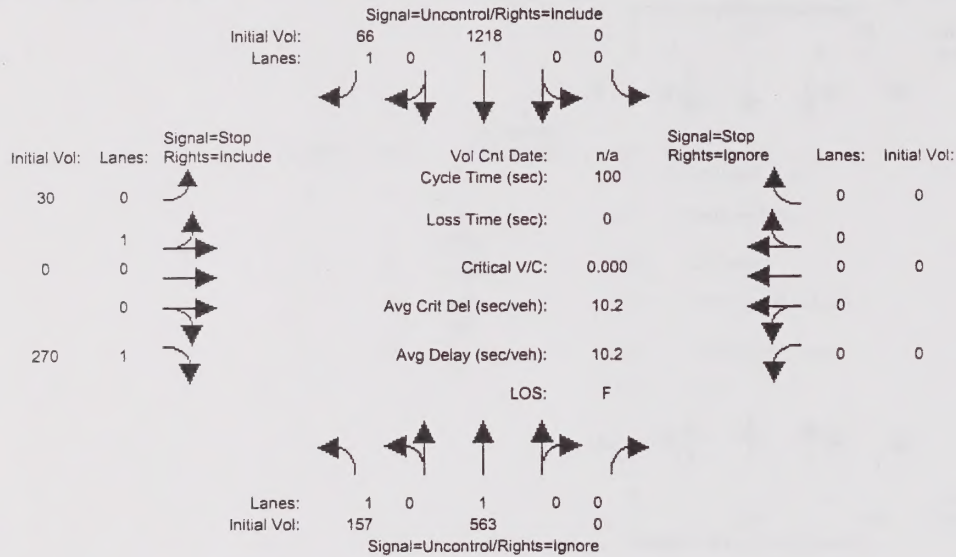
Intersection #5: Quito Rd. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	284	1062	0	0	561	83	16	0	130	0	0	0
Growth Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	284	1062	0	0	561	83	16	0	130	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	1062	0	0	561	83	16	0	130	0	0	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	284	1062	0	0	561	83	16	0	130	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	284	1062	0	0	561	83	16	0	130	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	312	1062	0	0	561	83	18	0	143	0	0	0
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.4	xxxx	2.6	xxxxxx	xxxx	xxxxxx
Critical Gp:	5.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.5	xxxx	5.5	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	644	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1907	xxxx	561	xxxx	xxxx	xxxxxx
Potent Cap.:	846	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	83	xxxx	720	xxxx	xxxx	xxxxxx
Adj Cap:	1.00	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.63	xxxx	1.00	xxxx	xxxx	xxxxxx
Move Cap.:	846	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	53	xxxx	720	xxxx	xxxx	xxxxxx
Level Of Service Module:												
Stopped Del:	6.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	97.9	xxxx	6.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	53	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	97.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	1.5			0.0			16.2			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
PM Peak

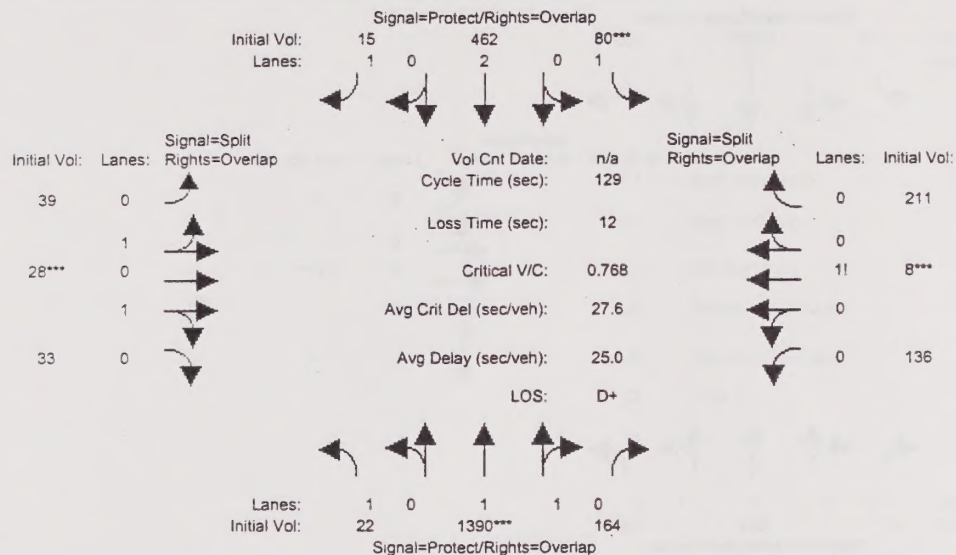
Intersection #5: Quito Rd. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	157	563	0	0	1218	66	30	0	270	0	0	0
Growth Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	157	563	0	0	1218	66	30	0	270	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	157	563	0	0	1218	66	30	0	270	0	0	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	157	563	0	0	1218	66	30	0	270	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	157	563	0	0	1218	66	30	0	270	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	173	563	0	0	1218	66	33	0	297	0	0	0
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.4	xxxx	2.6	xxxxxx	xxxx	xxxxxx
Critical Gp:	5.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.5	xxxx	5.5	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflict Vol:	1284	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1938	xxxx	1218	xxxx	xxxx	xxxxxx
Potent Cap.:	419	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	80	xxxx	334	xxxx	xxxx	xxxxxx
Adj Cap:	1.00	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.59	xxxx	1.00	xxxx	xxxx	xxxxxx
Move Cap.:	419	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	47	xxxx	334	xxxx	xxxx	xxxxxx
Level Of Service Module:												
Stopped Del:	13.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	191.7	xxxx	51.2	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	F	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	47	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	191.7	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	3.2				0.0		65.3				0.0	

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

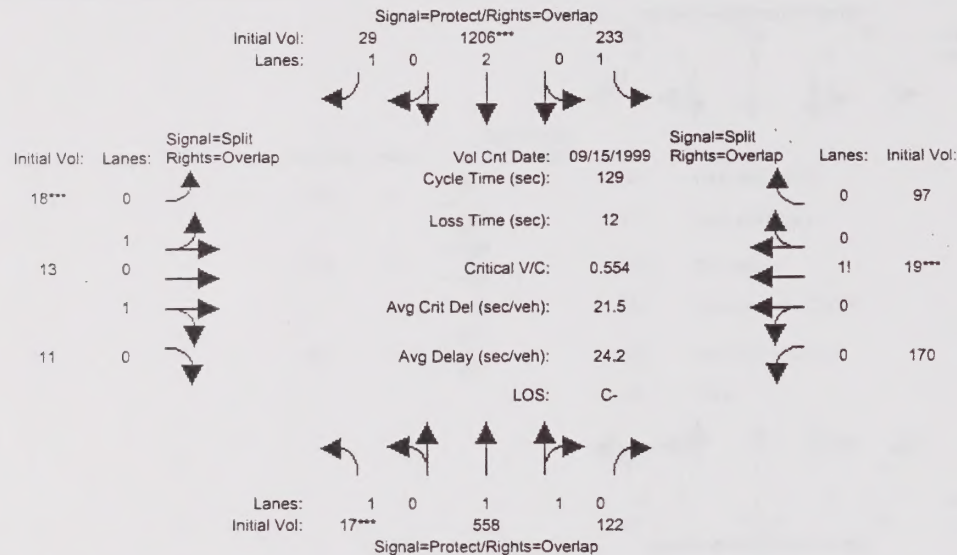
Intersection #4: Saratoga Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	22	1390	164	80	462	15	39	28	33	136	8	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	1390	164	80	462	15	39	28	33	136	8	211
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	1390	164	80	462	15	39	28	33	136	8	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	1390	164	80	462	15	39	28	33	136	8	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	1390	164	80	462	15	39	28	33	136	8	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	22	1390	164	80	462	15	39	28	33	136	8	211
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.78	0.22	1.00	2.00	1.00	0.78	0.56	0.66	0.38	0.02	0.60
Final Sat.:	1750	3309	390	1750	3800	1750	1404	1008	1188	670	39	1040
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.42	0.05	0.12	0.01	0.03	0.03	0.03	0.20	0.20	0.20
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	7.0	67.2	99.7	7.3	67.5	77.5	10.0	10.0	17.0	32.5	32.5	39.8
Volume/Cap:	0.23	0.81	0.54	0.81	0.23	0.01	0.36	0.36	0.21	0.81	0.81	0.66
Delay/Veh:	44.6	21.2	4.5	69.9	12.7	7.9	43.3	43.3	38.0	41.7	41.7	31.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.6	21.2	4.5	69.9	12.7	7.9	43.3	43.3	38.0	41.7	41.7	31.5
DesignQueue:	1	54	3	5	16	0	3	2	2	8	0	11

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

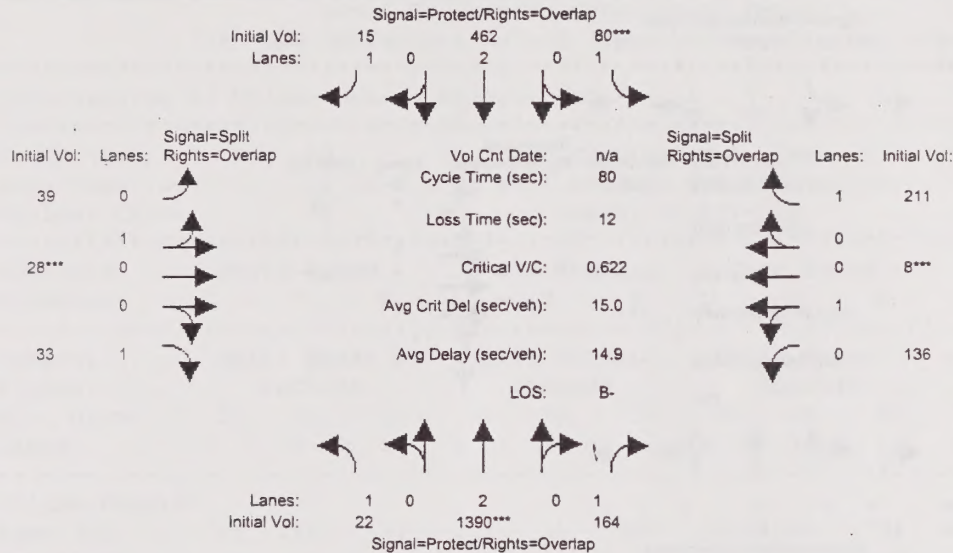
Intersection #4: Saratoga Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 15 Sep 1999 <<												
Base Vol:	17	558	122	233	1206	29	18	13	11	170	19	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	558	122	233	1206	29	18	13	11	170	19	97
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	558	122	233	1206	29	18	13	11	170	19	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	558	122	233	1206	29	18	13	11	170	19	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	558	122	233	1206	29	18	13	11	170	19	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	558	122	233	1206	29	18	13	11	170	19	97
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.06	0.97	1.00	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.63	0.37	1.00	2.00	1.00	0.86	0.62	0.52	0.59	0.07	0.34
Final Sat.:	1750	3036	664	1750	3800	1750	1543	1114	943	1040	116	594
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.13	0.32	0.02	0.01	0.01	0.01	0.16	0.16	0.16
Crit Moves:	****			****			****			****		
Green Time:	7.0	42.3	76.3	30.7	66.0	76.0	10.0	10.0	17.0	34.0	34.0	64.7
Volume/Cap:	0.18	0.56	0.31	0.56	0.62	0.03	0.15	0.15	0.09	0.62	0.62	0.33
Delay/Veh:	44.4	27.6	10.0	34.2	17.6	8.4	42.2	42.2	37.4	33.6	33.6	14.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.4	27.6	10.0	34.2	17.6	8.4	42.2	42.2	37.4	33.6	33.6	14.7
DesignQueue:	1	28	4	13	46	1	1	1	1	9	1	4

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

Intersection #3: Saratoga-Sunnyvale Ave. Cox Ave.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module:

Base Vol:	22	1390	164	80	462	15	39	28	33	136	8	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	1390	164	80	462	15	39	28	33	136	8	211
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	1390	164	80	462	15	39	28	33	136	8	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	1390	164	80	462	15	39	28	33	136	8	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	1390	164	80	462	15	39	28	33	136	8	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	22	1390	164	80	462	15	39	28	33	136	8	211

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.58	0.42	1.00	0.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1048	752	1750	1700	100	1750

Capacity Analysis Module:

Vol/Sat:	0.01	0.37	0.09	0.05	0.12	0.01	0.04	0.04	0.02	0.08	0.08	0.12
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	19.8	41.0	51.0	7.0	28.2	38.2	10.0	10.0	29.8	10.0	10.0	17.0
Volume/Cap:	0.05	0.71	0.15	0.52	0.34	0.02	0.30	0.30	0.05	0.64	0.64	0.57
Delay/Veh:	17.5	12.3	4.4	29.1	14.6	8.4	24.4	24.4	12.2	29.4	29.4	23.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.5	12.3	4.4	29.1	14.6	8.4	24.4	24.4	12.2	29.4	29.4	23.0
DesignQueue:	1	33	3	3	14	0	2	1	1	5	0	8

Level Of Service Computation Report
1985 HCM Operations Method (Base Volume Alternative)

Intersection #2 Miller Ave. Prospect Rd.

Cycle (sec): 58 Critical Vol./Cap. (X): 0.600
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Split Phase			Split Phase			Split Phase			Split Phase				
Rights:	Include			Include			Include			Include				
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10		
Lanes:	0	1	0	0	1	1	0	0	1	1	0	2	0	1

Volume Module:

Base Vol:	25	52	27	169	82	152	66	784	52	42	592	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	52	27	169	82	152	66	784	52	42	592	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	52	27	169	82	152	66	784	52	42	592	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	52	27	169	82	152	66	784	52	42	592	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	25	52	27	169	82	152	66	784	52	42	592	118

Saturation Flow Module:

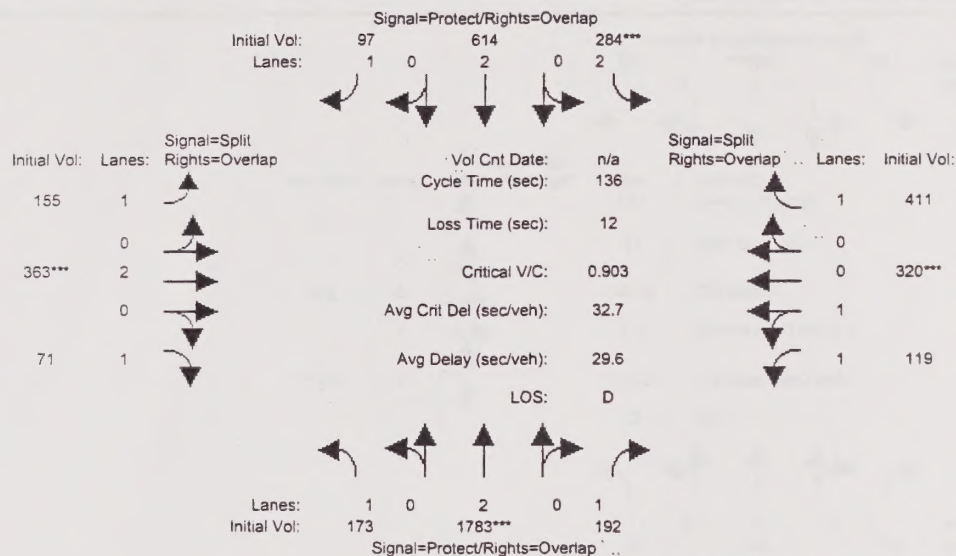
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	0.98	1.00	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	0.32	0.68	1.00	1.36	0.64	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	584	1216	1750	2390	1160	1750	1750	3800	1750	1750	3800	1750

Capacity Analysis Module:

Vol/Sat:	0.04	0.04	0.02	0.07	0.07	0.09	0.04	0.21	0.03	0.02	0.16	0.07
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	14.8	14.8	14.8	11.2	11.2	11.2
Volume/Cap:	0.25	0.25	0.09	0.41	0.41	0.50	0.15	0.81	0.12	0.12	0.81	0.35
Delay/Veh:	15.9	15.9	15.3	16.5	16.5	17.7	12.7	19.0	12.6	14.7	21.7	15.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.9	15.9	15.3	16.5	16.5	17.7	12.7	19.0	12.6	14.7	21.7	15.7
DesignQueue:	1	1	1	5	2	4	2	20	1	1	16	3

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
AM Peak

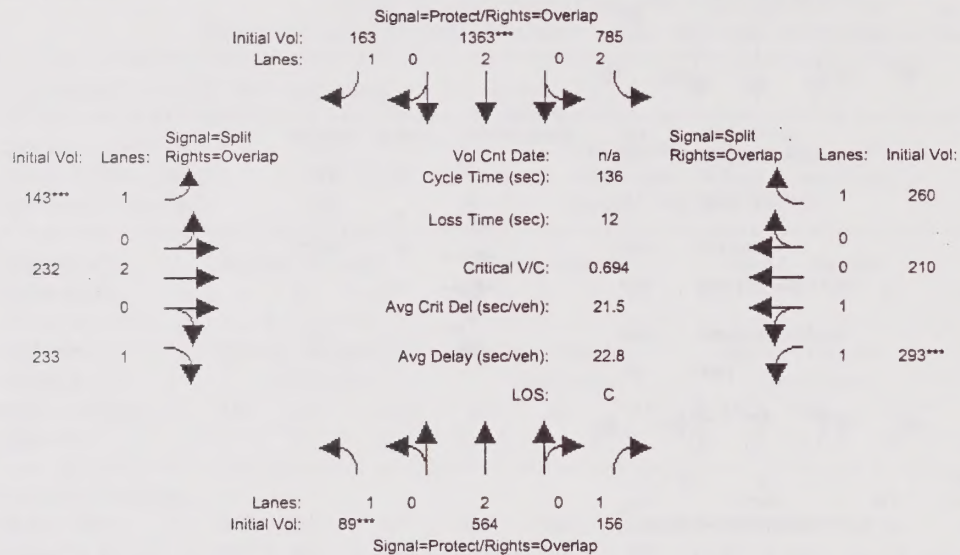
Intersection #1: Saratoga-Sunnyvale Rd. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	173	1783	192	284	614	97	155	363	71	119	320	411
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	173	1783	192	284	614	97	155	363	71	119	320	411
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	1783	192	284	614	97	155	363	71	119	320	411
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	173	1783	192	284	614	97	155	363	71	119	320	411
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	1783	192	284	614	97	155	363	71	119	320	411
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	173	1783	192	284	614	97	155	363	71	119	320	411
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.47	0.11	0.09	0.16	0.06	0.09	0.10	0.04	0.07	0.17	0.23
Crit Moves:	****			****			****			****		
Green Time:	32.0	70.7	96.0	13.6	52.3	66.7	14.4	14.4	46.4	25.4	25.4	38.9
Volume/Cap:	0.42	0.90	0.16	0.90	0.42	0.11	0.84	0.90	0.12	0.36	0.90	0.82
Delay/Veh:	34.0	27.0	5.0	65.5	23.5	14.2	63.7	62.0	23.4	36.8	55.3	41.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.59	0.42	1.00	0.42	0.42	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	16.0	2.1	65.5	9.9	6.0	63.7	62.0	23.4	36.8	55.3	41.6
DesignQueue:	10	74	4	20	30	4	11	25	4	7	21	24

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
PM Peak

Intersection #1: Saratoga-Sunnyvale Rd. Prospect Rd.



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	89	564	156	785	1363	163	143	232	233	293	210	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	564	156	785	1363	163	143	232	233	293	210	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	564	156	785	1363	163	143	232	233	293	210	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	564	156	785	1363	163	143	232	233	293	210	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	564	156	785	1363	163	143	232	233	293	210	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	89	564	156	785	1363	163	143	232	233	293	210	260
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.98	1.00	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.18	0.82	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	2068	1482	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.09	0.25	0.36	0.09	0.08	0.06	0.13	0.14	0.14	0.15
Crit Moves:	****			****			****			****		
Green Time:	10.0	29.9	57.7	50.3	70.3	86.3	16.0	16.0	26.0	27.8	27.8	78.0
Volume/Cap:	0.69	0.67	0.21	0.67	0.69	0.15	0.69	0.52	0.70	0.69	0.69	0.26
Delay/Veh:	56.7	38.4	18.8	28.4	19.6	7.6	50.3	43.7	43.3	40.2	40.2	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.46	0.42	1.00	0.47	0.42	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	17.7	7.9	28.4	9.2	3.2	50.3	43.7	43.3	40.2	40.2	11.1
DesignQueue:	6	35	7	40	55	5	10	16	15	18	13	9

**EXISTING INTERSECTION LEVEL OF SERVICE
CALCULATION WORKSHEETS**

Marks Traffic Data Service

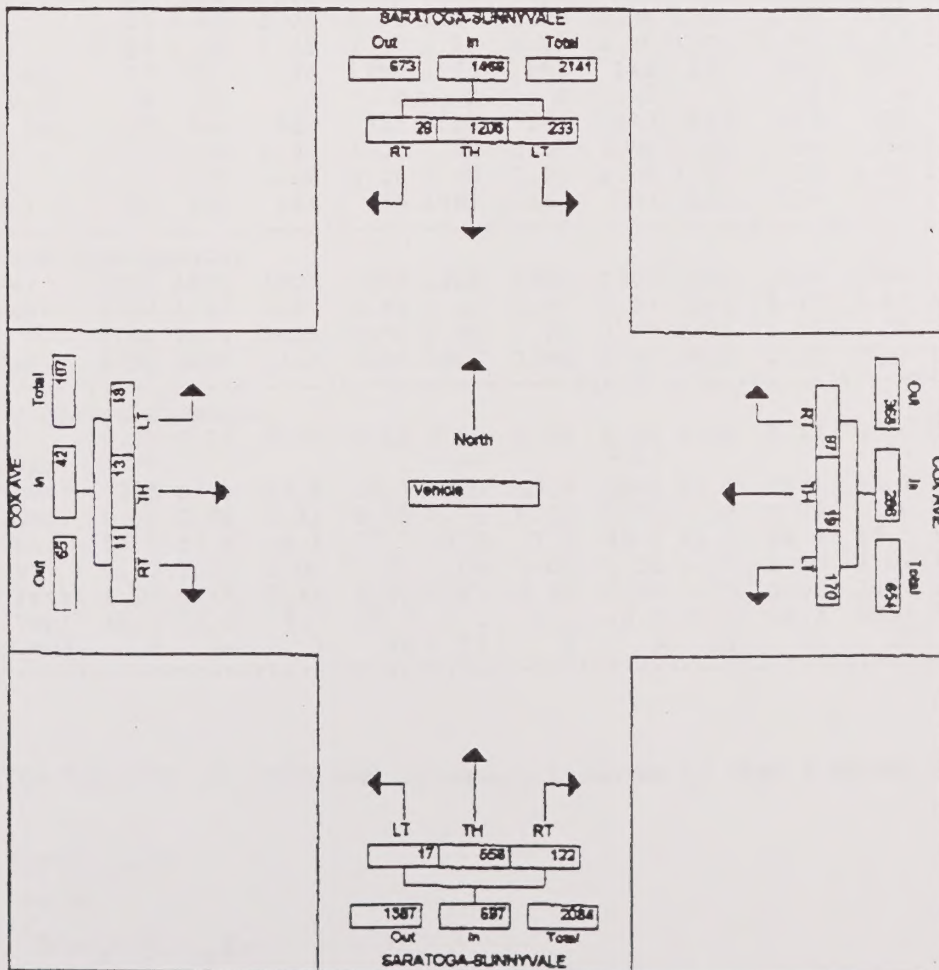
Y OF SARATOGA

File Name : Saratoga_Sunnyv_Cox_P
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

Start Time	SARATOGA-SUNNYVALE Southbound				COX AVE. Westbound				SARATOGA-SUNNYVALE Northbound				COX AVE. Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
18:00	7	193	28	228	20	3	32	55	45	186	4	216	1	3	4	8	508
18:15	4	201	47	252	25	5	35	65	48	156	2	204	0	5	4	9	530
18:30	5	224	34	263	32	3	33	68	41	162	5	208	5	6	10	21	560
18:45	5	243	56	304	33	2	33	68	39	174	4	217	2	5	6	13	602
Total	21	661	166	1048	110	13	133	256	172	658	15	845	8	19	24	51	2200
17:00	5	214	58	277	14	1	36	51	37	118	1	156	2	2	2	8	490
17:15	9	296	56	361	33	5	40	78	25	155	4	184	5	2	3	10	633
17:30	8	357	69	434	24	8	47	79	31	132	3	166	3	4	5	12	691
17:45	7	339	50	389	26	5	47	78	29	153	9	191	1	5	8	14	678
Total	29	1206	233	1468	97	19	170	288	122	558	17	697	11	13	18	42	2493
Grand Total	50	2067	399	2516	207	32	303	542	294	1216	32	1542	19	32	42	93	4693
Approch %	2.0	82.2	15.9		38.2	5.9	55.9		19.1	78.9	2.1		20.4	34.4	45.2		
Total %	1.1	44.0	8.5	53.6	4.4	0.7	6.5	11.5	6.3	25.9	0.7	32.9	0.4	0.7	0.9	2.0	

Start Time	SARATOGA-SUNNYVALE Southbound				COX AVE. Westbound				SARATOGA-SUNNYVALE Northbound				COX AVE. Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Hour From Intersection	18:00 to 17:45 - Peak 1 of 1																
Volume	29	1206	233	1468	97	19	170	288	122	558	17	697	11	13	18	42	2493
Percent	2.0	82.2	15.9		33.9	6.6	59.4		17.5	80.1	2.4		26.2	31.0	42.9		
High Int.	17:30				17:30				17:45				17:45				17:30
Volume	9	357	69	434	33	8	47	79	37	155	9	191	5	5	8	14	691
Peak Factor				0.848				0.905				0.912				0.750	0.902



1. Introduction

Table 1: Data for Figure 1	
Year	2010
Year	2011
Year	2012
Year	2013
Year	2014
Year	2015
Year	2016
Year	2017
Year	2018
Year	2019
Year	2020
Year	2021
Year	2022
Year	2023
Year	2024
Year	2025
Year	2026
Year	2027
Year	2028
Year	2029
Year	2030

Figure 1: A line graph showing the trend of data over time. The x-axis represents years from 2010 to 2030, and the y-axis represents the magnitude of the data. The graph shows a general upward trend with some fluctuations.



1998 Peak Hour LOS Monitoring
 Santa Clara Valley Transportation Authority
 Congestion Management Program

Level Of Service Computation Report
 1985 HCM Operations Method (Future Volume Alternative)

 Intersection #206 De Anza Blvd/Prospect Rd

Cycle (sec): 132 Critical Vol./Cap. (X): 0.696
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.2
 Optimal Cycle: 62 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Protected			Protected			Split Phase			Split Phase				
Rights:	Ovl			Ovl			Ovl			Ovl				
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10		
Lanes:	1	0	2	0	1	2	0	2	0	1	1	0	0	1

Volume Module:	>>	Count	Date:	11 Nov 1998	<<							
Base Vol:	89	564	156	785	1363	163	143	232	233	293	210	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	564	156	785	1363	163	143	232	233	293	210	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	564	156	785	1363	163	143	232	233	293	210	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	564	156	785	1363	163	143	232	233	293	210	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	564	156	785	1363	163	143	232	233	293	210	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	89	564	156	785	1363	163	143	232	233	293	210	260

Saturation Flow Module:	Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.98	1.00	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.18	0.82	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	2068	1482	1750

Capacity Analysis Module:	Vol/Sat:	0.05	0.15	0.09	0.25	0.36	0.09	0.08	0.06	0.13	0.14	0.14	0.15
Crit Moves:	****				****		****				****		
Green Time:	9.6	29.0	55.8	48.7	68.0	83.5	15.5	15.5	25.1	26.9	26.9	75.5	
Volume/Cap:	0.70	0.68	0.21	0.68	0.70	0.15	0.70	0.52	0.70	0.70	0.70	0.26	
Delay/Veh:	55.5	37.4	18.4	27.7	19.2	7.5	49.2	42.5	42.3	39.1	39.1	10.8	
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
ProgAdjFctr:	1.00	0.46	0.42	1.00	0.47	0.42	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	55.5	17.3	7.7	27.7	9.1	3.1	49.2	42.5	42.3	39.1	39.1	10.8	
DesignQueue:	6	34	7	38	54	4	9	15	14	18	13	8	

semi-act

yes

Main S W/S

Side 3 E/W

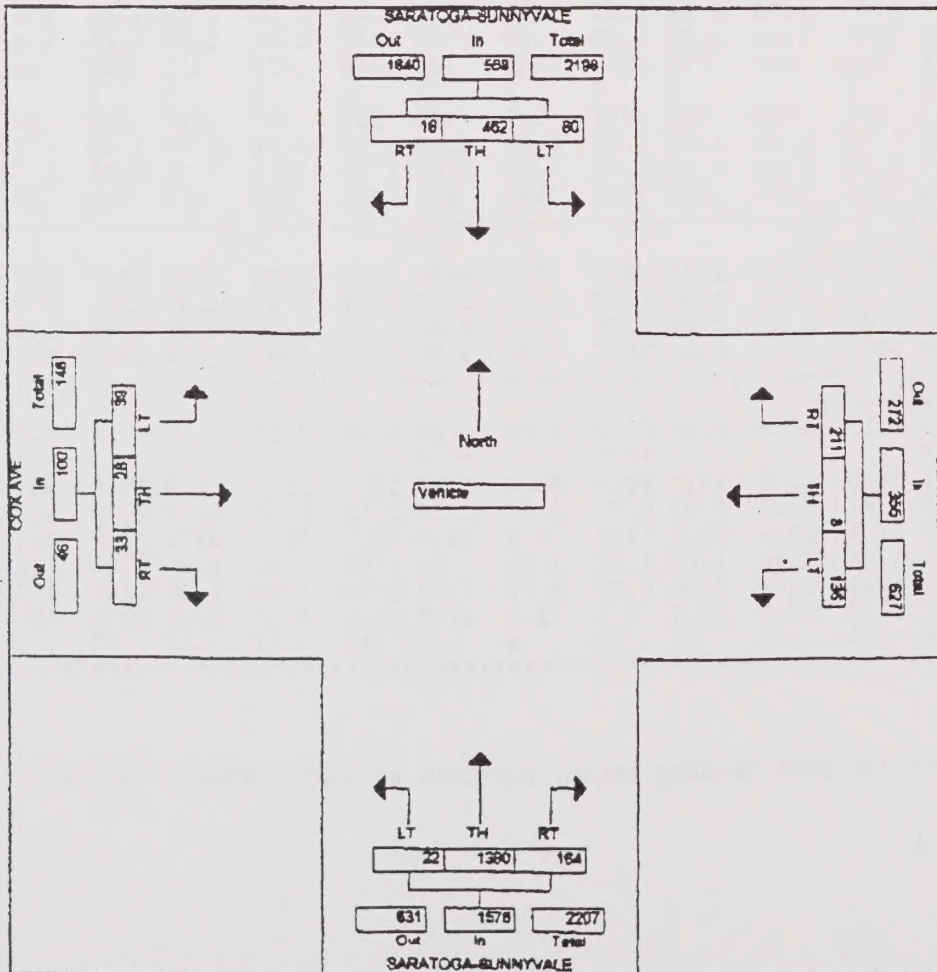
CITY OF SARATOGA

File Name : Saratoga_Sunnyvale_Cox_A
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

SARATOGA-SUNNYVALE Southbound					COX AVE. Westbound				SARATOGA-SUNNYVALE Northbound				COX AVE. Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	1	55	5	61	17	0	14	31	17	208	1	226	2	2	6	10	328
07:15	3	79	5	87	37	3	23	63	17	281	0	298	3	3	1	7	455
07:30	3	91	13	107	38	2	33	73	30	300	3	333	9	3	3	15	528
07:45	5	121	19	145	53	0	39	92	53	391	3	447	12	7	24	43	727
Total	12	348	42	400	145	5	109	259	117	1180	7	1304	26	15	34	75	2038
08:00	1	112	16	129	63	3	21	87	31	310	7	348	5	10	3	18	582
08:15	4	106	18	130	53	4	45	102	43	359	7	409	12	7	8	27	606
08:30	6	121	27	154	42	1	31	74	37	330	5	372	4	4	4	12	612
08:45	4	110	17	131	45	6	29	80	33	293	2	328	3	9	9	21	560
Total	15	451	78	544	203	14	126	343	144	1292	21	1457	24	30	24	78	2422
Grand Total	27	797	120	944	348	19	235	602	261	2472	28	2761	50	45	58	153	4480
Approch %	2.9	84.4	12.7		57.8	3.2	39.0		9.5	89.5	1.0		32.7	29.4	37.9		
Total %	0.8	17.9	2.7	21.2	7.8	0.4	5.3	13.5	5.9	55.4	0.6	61.9	1.1	1.0	1.3	3.4	

SARATOGA-SUNNYVALE Southbound					COX AVE. Westbound				SARATOGA-SUNNYVALE Northbound				COX AVE. Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	16	482	80	558	211	8	136	355	164	1390	22	1576	33	28	39	100	2589
Percent	2.9	82.8	14.3		59.4	2.3	38.3		10.4	88.2	1.4		33.0	28.0	39.0		
High Int. 08:30					08:15				07:45				07:45				07:45
Volume	6	121	27	154	63	4	45	102	53	391	7	447	12	10	24	43	727
Peak Factor				0.808				0.670				0.881				0.581	0.890



This traffic count was performed at the intersection of Miller Ave. and Prospect Rd by Jason Pack of Fehr and Peers Associates. The PM traffic counts were conducted Wednesday, October 27, 1999 and the AM traffic counts were conducted Thursday, October 28, 1999. These counts will be used to calculate Level of Service for the intersection.

Running Totals

Ending Time

	Northbound			Eastbound			Southbound			Westbound			Total
AM	RT	Through	LT	RT	Through	LT	RT	Through	LT	RT	Through	LT	
7:15	3	7	10	0	52	22	7	2	7	20	53	3	186
7:30	15	23	13	2	175	61	15	3	19	46	167	7	546
7:45	25	75	20	5	322	146	59	18	42	95	370	15	1192
8:00	29	83	34	12	396	168	78	27	55	121	469	18	1490
8:15	32	106	51	24	535	206	89	33	68	162	623	24	1953
8:30	42	139	63	35	721	252	107	43	99	190	771	31	2493
8:45	57	198	88	41	879	325	127	60	144	235	966	40	3160
9:00	63	217	99	48	983	353	155	65	166	268	1096	49	3562
PM													
4:15	11	9	8	25	174	3	26	11	35	22	124	8	456
4:30	14	22	10	5	298	38	55	18	59	47	245	21	832
4:45	21	36	16	16	479	68	96	39	89	69	375	27	1331
5:00	25	41	21	21	627	92	137	49	134	99	499	35	1780
5:15	30	53	28	34	827	106	156	68	188	134	626	46	2296
5:30	41	65	33	42	1102	121	192	83	226	167	773	57	2902
5:45	47	77	41	55	1215	140	233	110	263	195	936	66	3378
6:00	52	93	46	73	1411	158	289	131	303	217	1091	77	3941

Traffic/Interval

	Northbound			Eastbound			Southbound			Westbound			
AM	RT	Through	LT	RT	Through	LT	RT	Through	LT	RT	Through	LT	
7:15	3	7	10	0	52	22	7	2	7	20	53	3	186
7:30	12	16	3	2	123	39	8	1	12	26	114	4	360
7:45	10	52	7	3	147	85	44	15	23	49	203	8	646
8:00	4	8	14	7	74	22	19	9	13	26	99	3	298 1490
8:15	3	23	17	12	139	38	11	6	13	41	154	6	463 1767
8:30	10	33	12	11	186	46	18	10	31	28	148	7	540 1947
8:45	15	59	25	6	158	73	20	17	45	45	195	9	667 1968
9:00	6	19	11	7	104	28	28	5	22	33	130	9	402 2072
													3562
PM													
4:15	11	9	8	25	174	3	26	11	35	22	124	8	456
4:30	3	13	2	-20	124	35	29	7	24	25	121	13	376
4:45	7	14	6	11	181	30	41	21	30	22	130	6	499
5:00	4	5	5	5	148	24	41	10	45	30	124	8	449 1780
5:15	5	12	7	13	200	14	19	19	54	35	127	11	516 1840
5:30	11	12	5	8	275	15	36	15	38	33	147	11	606 2070
5:45	6	12	8	13	113	19	41	27	37	28	163	9	476 2047
6:00	5	16	5	18	196	18	56	21	40	22	155	11	563 2161
													3941

Peak Hour AM

8:15	3	23	17	12	139	38	11	6	13	41	154	6
8:30	10	33	12	11	186	46	18	10	31	28	148	7
8:45	15	59	25	6	158	73	20	17	45	45	195	9
9:00	6	19	11	7	104	28	28	5	22	33	130	9
Total	34	134	65	36	587	185	77	38	111	147	627	31

Peak Hour PM

5:15	5	12	7	13	200	14	19	19	54	35	127	11
5:30	11	12	5	8	275	15	36	15	38	33	147	11
5:45	6	12	8	13	113	19	41	27	37	28	163	9
6:00	5	16	5	18	196	18	56	21	40	22	155	11
Total	27	52	25	52	784	66	152	82	169	118	592	42

1998 Peak Hour LOS Monitoring
Santa Clara Valley Transportation Authority
Congestion Management Program

Level of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #206 De Anza Blvd/Prospect Rd

Cycle (sec): 136 Critical Vol./Cap. (X): 0.903
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.6
Optimal Cycle: 129 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Split Phase			Split Phase			
Rights:	Ovl			Ovl			Ovl			Ovl			
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10	
Lanes:	1	0	2	0	1	2	0	2	0	1	1	0	0

Volume Module: >> Count Date: 13 Oct 1998 <<

Base Vol:	173	1783	192	284	614	97	155	363	71	119	320	411
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	173	1783	192	284	614	97	155	363	71	119	320	411
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	1783	192	284	614	97	155	363	71	119	320	411
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	173	1783	192	284	614	97	155	363	71	119	320	411
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	1783	192	284	614	97	155	363	71	119	320	411
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	173	1783	192	284	614	97	155	363	71	119	320	411

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.88	1.06	0.97	0.97	1.06	0.97	0.97	1.06	0.97
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1750	3800	1750	1750	1900	1750

Capacity Analysis Module:

Vol/Sat:	0.10	0.47	0.11	0.09	0.16	0.06	0.09	0.10	0.04	0.07	0.17	0.23
Crit Moves:	****			****			****			****		
Green Time:	32.0	70.7	96.0	13.6	52.3	66.7	14.4	14.4	46.4	25.4	25.4	38.9
Volume/Cap:	0.42	0.90	0.16	0.90	0.42	0.11	0.84	0.90	0.12	0.36	0.90	0.82
Delay/Veh:	34.0	27.0	5.0	65.5	23.5	14.2	63.7	62.0	23.4	36.8	55.3	41.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	0.59	0.42	1.00	0.42	0.42	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	16.0	2.1	65.5	9.9	6.0	63.7	62.0	23.4	36.8	55.3	41.6
DesignQueue:	10	74	4	20	30	4	11	25	4	7	21	24

Marks Traffic Data Service

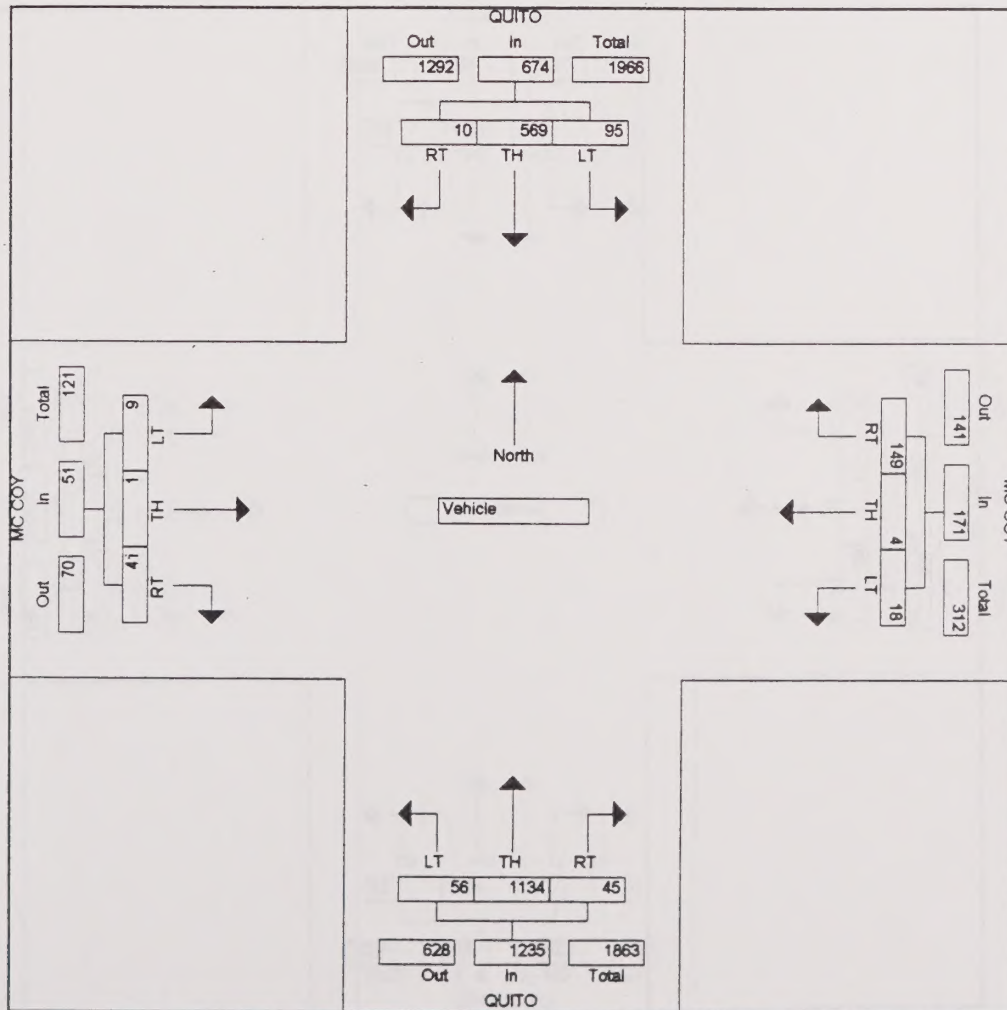
CITY OF SARATOGA

File Name : Quito_McCoy_
Site Code : 00000000
Start Date : 09/21/1999
Page : 1

Groups Printed: Vehicle

	QUITO Southbound				MC COY Westbound				QUITO Northbound				MC COY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	41	4	45	33	3	4	40	4	180	0	184	0	0	0	0	269
07:15	1	66	6	73	40	24	5	69	14	238	2	254	3	50	1	54	450
07:30	1	82	15	98	44	1	0	45	4	328	4	336	2	1	1	4	483
07:45	3	116	27	146	30	1	2	33	16	301	13	330	11	1	3	15	524
Total	5	305	52	362	147	29	11	187	38	1047	19	1104	16	52	5	73	1726
08:00	3	144	29	176	42	1	3	46	14	265	10	289	19	0	3	22	533
08:15	2	160	13	175	40	2	11	53	4	305	17	326	8	0	1	9	563
08:30	2	149	26	177	37	0	2	39	11	263	16	290	3	0	2	5	511
08:45	2	172	38	212	42	1	4	47	11	213	0	224	0	0	2	2	485
Total	9	625	106	740	161	4	20	185	40	1046	43	1129	30	0	8	38	2092
Grand Total	14	930	158	1102	308	33	31	372	78	2093	62	2233	46	52	13	111	3818
Apprch %	1.3	84.4	14.3		82.8	8.9	8.3		3.5	93.7	2.8		41.4	46.8	11.7		
Total %	0.4	24.4	4.1	28.9	8.1	0.9	0.8	9.7	2.0	54.8	1.6	58.5	1.2	1.4	0.3	2.9	

	QUITO Southbound				MC COY Westbound				QUITO Northbound				MC COY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	10	569	95	674	149	4	18	171	45	1134	56	1235	41	1	9	51	2131
Percent	1.5	84.4	14.1		87.1	2.3	10.5		3.6	91.8	4.5		80.4	2.0	17.6		
High Int. 08:30					08:15				07:45				08:00				08:15
Volume	3	160	29	177	42	2	11	53	16	305	17	330	19	1	3	22	563
Peak Factor				0.952				0.807				0.936				0.580	0.946



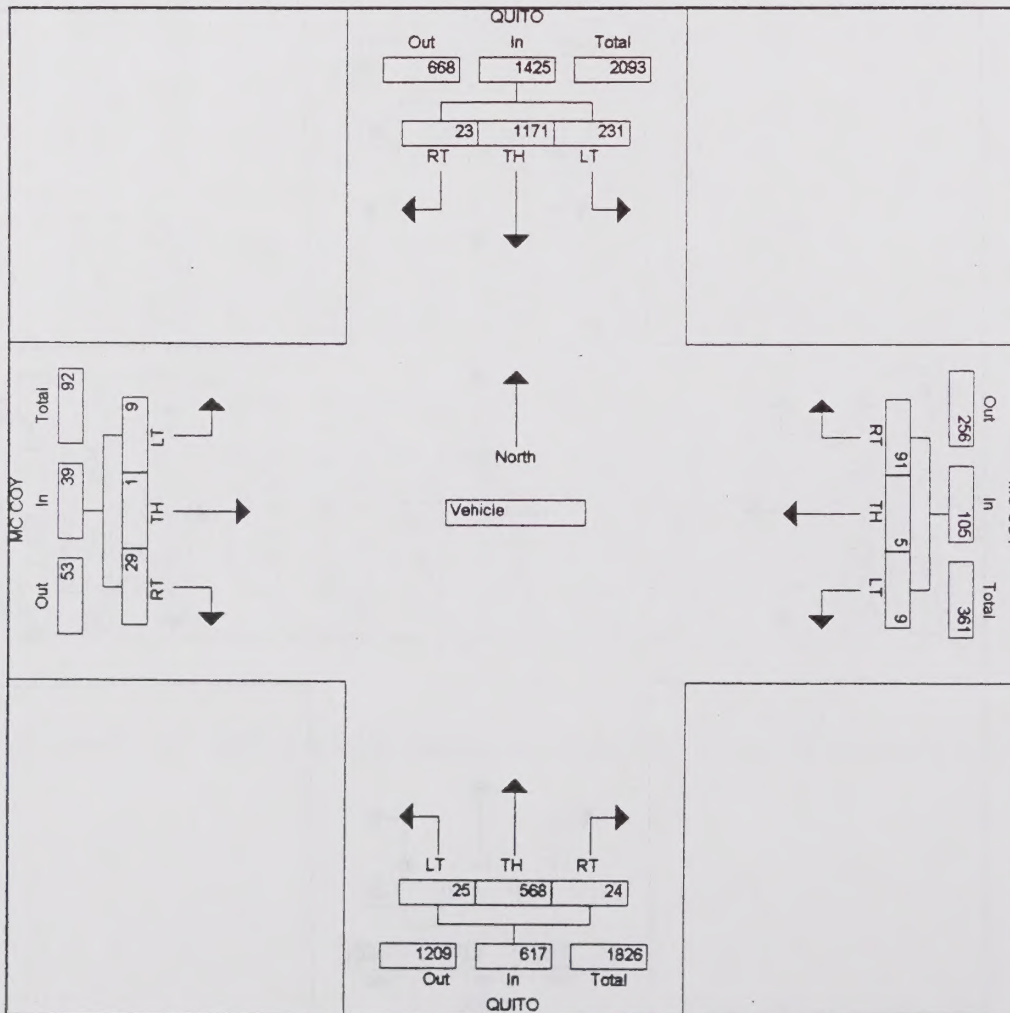
Marks Traffic Data Service

File Name : Quito_McCoy
 Site Code : 0000000
 Start Date : 09/21/1999
 Page : 1

Groups Printed: Vehicle

Start Time	QUITO Southbound				MC COY Westbound				QUITO Northbound				MC COY Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	5	184	44	233	15	2	4	21	6	143	4	153	2	0	3	5	412
16:15	5	218	37	260	37	0	3	40	3	129	2	134	5	1	0	6	440
16:30	3	216	50	269	28	1	7	36	6	124	5	135	3	0	1	4	444
16:45	7	250	55	312	16	1	1	18	4	131	3	138	4	2	4	10	478
Total	20	868	186	1074	96	4	15	115	19	527	14	560	14	3	8	25	1774
17:00	12	260	49	321	24	0	2	26	4	151	6	161	8	1	3	12	520
17:15	4	303	55	362	23	3	5	31	5	141	7	153	6	0	1	7	553
17:30	6	308	58	372	27	0	1	28	8	148	8	164	9	0	2	11	575
17:45	1	300	69	370	17	2	1	20	7	128	4	139	6	0	3	9	538
Total	23	1171	231	1425	91	5	9	105	24	568	25	617	29	1	9	39	2186
Grand Total	43	2039	417	2499	187	9	24	220	43	1095	39	1177	43	4	17	64	3960
Apprch %	1.7	81.6	16.7		85.0	4.1	10.9		3.7	93.0	3.3		67.2	6.3	26.6		
Total %	1.1	51.5	10.5	63.1	4.7	0.2	0.6	5.6	1.1	27.7	1.0	29.7	1.1	0.1	0.4	1.6	

Start Time	QUITO Southbound				MC COY Westbound				QUITO Northbound				MC COY Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	23	1171	231	1425	91	5	9	105	24	568	25	617	29	1	9	39	2186
Percent	1.6	82.2	16.2		86.7	4.8	8.6		3.9	92.1	4.1		74.4	2.6	23.1		
High Int. 17:30					17:15				17:30				17:00				17:30
Volume	12	308	69	372	27	3	5	31	8	151	8	164	9	1	3	12	575
Peak Factor				0.958				0.847				0.941				0.813	0.950



Marks Traffic Data Service

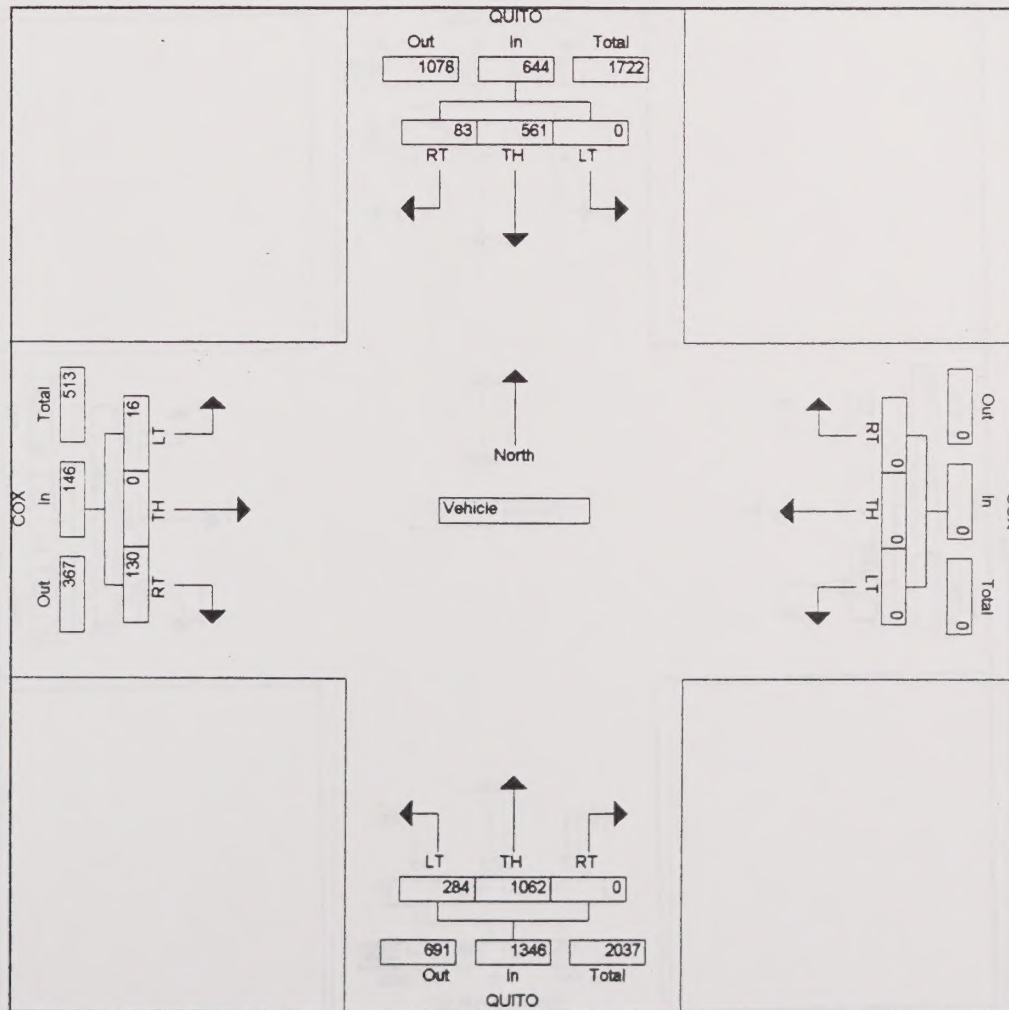
CITY OF SARATOGA

File Name : Quito_Cox
Site Code : 00000000
Start Date : 09/22/1996
Page : 1

Groups Printed: Vehicle

Start Time	QUITO Southbound				COX Westbound				QUITO Northbound				COX Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	22	64	0	86	0	0	0	0	0	256	67	323	9	0	2	11	420
07:15	16	83	0	99	0	0	0	0	0	306	95	401	22	0	2	24	524
07:30	17	84	0	101	0	0	0	0	0	305	78	383	14	0	0	14	498
07:45	16	135	0	151	0	0	0	0	0	277	65	342	33	0	7	40	533
Total	71	366	0	437	0	0	0	0	0	1144	305	1449	78	0	11	89	1975
08:00	24	134	0	158	0	0	0	0	0	262	86	348	31	0	3	34	540
08:15	24	138	0	162	0	0	0	0	0	263	69	332	28	0	5	33	527
08:30	19	154	0	173	0	0	0	0	0	260	64	324	38	0	1	39	536
08:45	20	157	0	177	0	0	0	0	0	209	74	283	41	0	8	49	509
Total	87	583	0	670	0	0	0	0	0	994	293	1287	138	0	17	155	2112
Grand Total	158	949	0	1107	0	0	0	0	0	2138	598	2736	216	0	28	244	4087
Apprch %	14.3	85.7	0.0		0.0	0.0	0.0		0.0	78.1	21.9		88.5	0.0	11.5		
Total %	3.9	23.2	0.0	27.1	0.0	0.0	0.0	0.0	0.0	52.3	14.6	66.9	5.3	0.0	0.7	6.0	

Start Time	QUITO Southbound				COX Westbound				QUITO Northbound				COX Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	83	561	0	644	0	0	0	0	0	1062	284	1346	130	0	16	146	2136
Percent	12.9	87.1	0.0		0.0	0.0	0.0		0.0	78.9	21.1		89.0	0.0	11.0		
High Int. 08:30					6:45:00 AM				08:00				07:45				08:00
Volume	24	154	0	173	0	0	0	0	0	277	86	348	38	0	7	40	540
Peak Factor				0.931								0.967				0.913	0.989



Marks Traffic Data Service

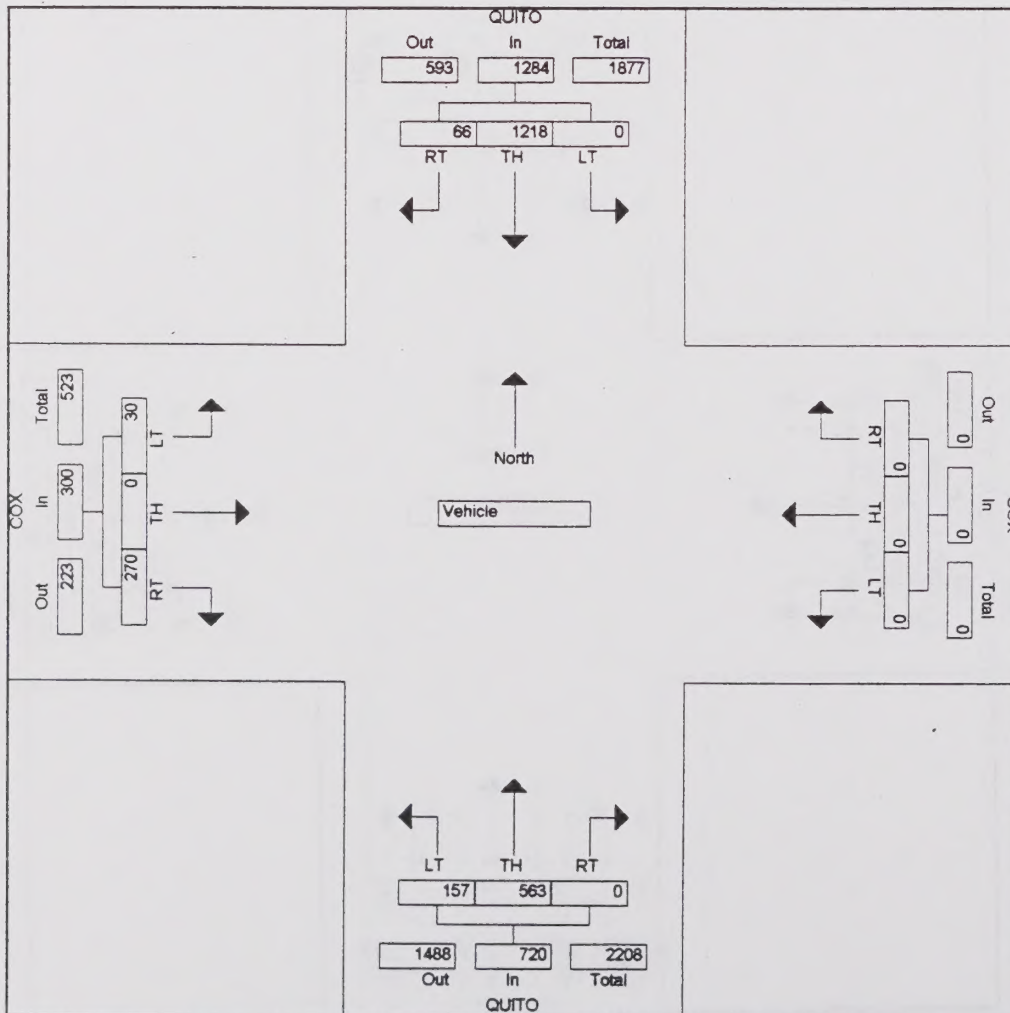
CITY OF SARATOGA

File Name : Quito_Cox_
Site Code : 00000000
Start Date : 09/22/1999
Page : 1

Groups Printed: Vehicle

Start Time	QUITO Southbound				COX Westbound				QUITO Northbound				COX Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	11	194	0	205	0	0	0	0	0	140	30	170	48	0	2	50	425
16:15	12	202	0	214	0	0	0	0	0	138	32	170	58	0	7	65	449
16:30	12	223	0	235	0	0	0	0	0	125	41	166	58	0	6	64	465
16:45	9	270	0	279	0	0	0	0	0	136	24	160	70	0	12	82	521
Total	44	889	0	933	0	0	0	0	0	539	127	666	234	0	27	261	1860
17:00	22	275	0	297	0	0	0	0	0	149	38	187	57	0	9	66	550
17:15	12	305	0	317	0	0	0	0	0	136	40	176	67	0	8	75	568
17:30	15	318	0	333	0	0	0	0	0	150	42	192	74	0	8	82	607
17:45	17	320	0	337	0	0	0	0	0	128	37	165	72	0	5	77	579
Total	66	1218	0	1284	0	0	0	0	0	563	157	720	270	0	30	300	2304
Grand Total	110	2107	0	2217	0	0	0	0	0	1102	284	1386	504	0	57	561	4164
Apprch %	5.0	95.0	0.0		0.0	0.0	0.0		0.0	79.5	20.5		89.8	0.0	10.2		
Total %	2.6	50.6	0.0	53.2	0.0	0.0	0.0	0.0	0.0	26.5	6.8	33.3	12.1	0.0	1.4	13.5	

Start Time	QUITO Southbound				COX Westbound				QUITO Northbound				COX Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	66	1218	0	1284	0	0	0	0	0	563	157	720	270	0	30	300	2304
Percent	5.1	94.9	0.0		0.0	0.0	0.0		0.0	78.2	21.8		90.0	0.0	10.0		
High Int. 17:45					3:45:00 PM				17:30				17:30				17:30
Volume	22	320	0	337	0	0	0	0	0	150	42	192	74	0	9	82	607
Peak Factor				0.953								0.938				0.915	0.949



Marks Traffic Data Service

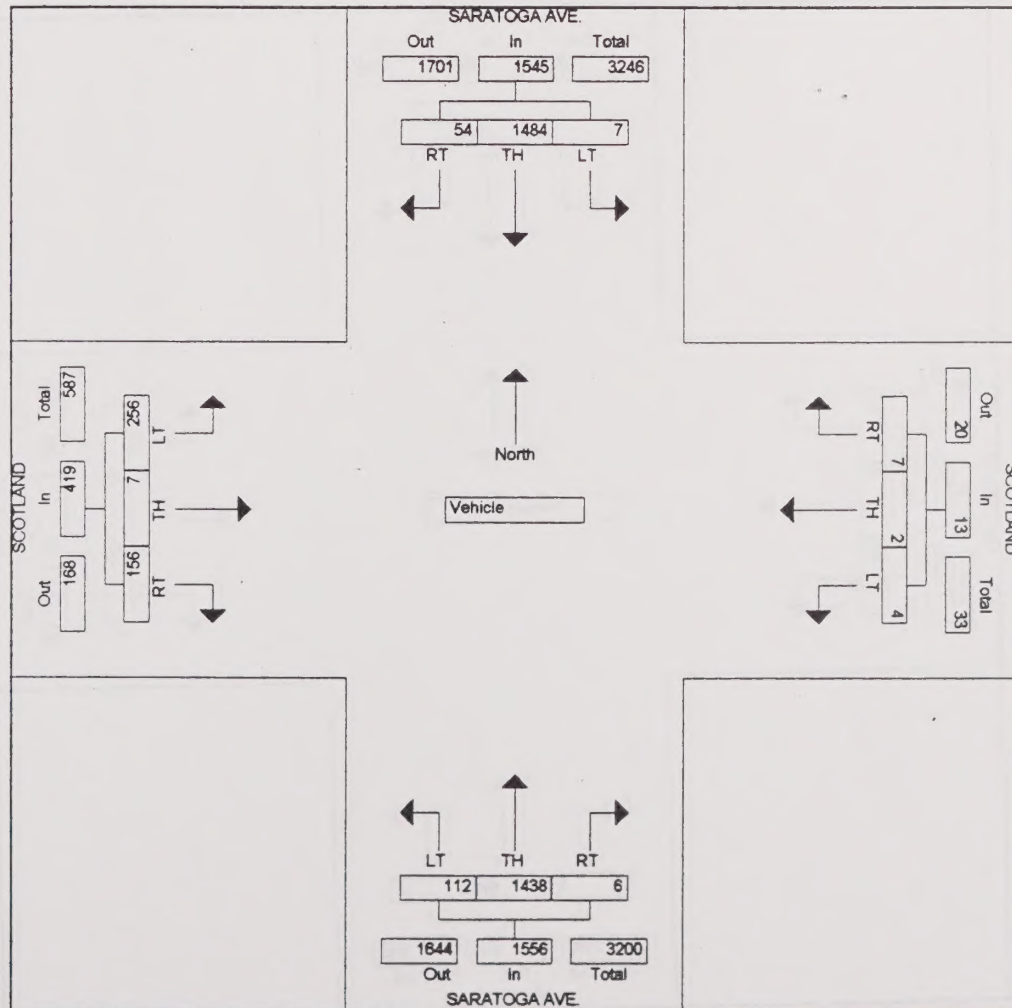
CITY OF SARATOGA

File Name : Saratoga_Scotland
 Site Code : 00000000
 Start Date : 09/21/1999
 Page : 1

Groups Printed: Vehicle

	SARATOGA AVE. Southbound				SCOTLAND Westbound				SARATOGA AVE. Northbound				SCOTLAND Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
07:00	2	184	0	186	1	0	0	1	0	274	9	283	18	0	13	31	501
07:15	4	225	0	229	2	0	0	2	0	282	15	297	17	0	16	33	561
07:30	8	218	1	227	0	0	0	0	0	329	10	339	18	0	38	56	622
07:45	7	276	1	284	2	1	1	4	0	312	33	345	51	16	69	136	769
Total	21	903	2	926	5	1	1	7	0	1197	67	1264	104	16	136	256	2453
08:00	14	230	1	245	3	1	3	7	4	428	66	498	69	2	51	122	872
08:15	16	340	2	358	1	1	0	2	1	393	29	423	58	5	77	140	923
08:30	14	396	2	412	2	0	0	2	1	337	7	345	14	0	75	89	848
08:45	10	518	2	530	1	0	1	2	0	280	10	290	15	0	53	68	890
Total	54	1484	7	1545	7	2	4	13	6	1438	112	1556	156	7	256	419	3533
Grand Total	75	2387	9	2471	12	3	5	20	6	2635	179	2820	260	23	392	675	5986
Apprch %	3.0	96.6	0.4		60.0	15.0	25.0		0.2	93.4	6.3		38.5	3.4	58.1		
Total %	1.3	39.9	0.2	41.3	0.2	0.1	0.1	0.3	0.1	44.0	3.0	47.1	4.3	0.4	6.5	11.3	

	SARATOGA AVE. Southbound				SCOTLAND Westbound				SARATOGA AVE. Northbound				SCOTLAND Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 08:00																	
Volume	54	1484	7	1545	7	2	4	13	6	1438	112	1556	156	7	256	419	3533
Percent	3.5	96.1	0.5		53.8	15.4	30.8		0.4	92.4	7.2		37.2	1.7	61.1		
High Int. 08:45					08:00				08:00				08:15				08:15
Volume	16	518	2	530	3	1	3	7	4	428	66	498	69	5	77	140	923
Peak Factor				0.729				0.464				0.781				0.748	0.957



Marks Traffic Data Service

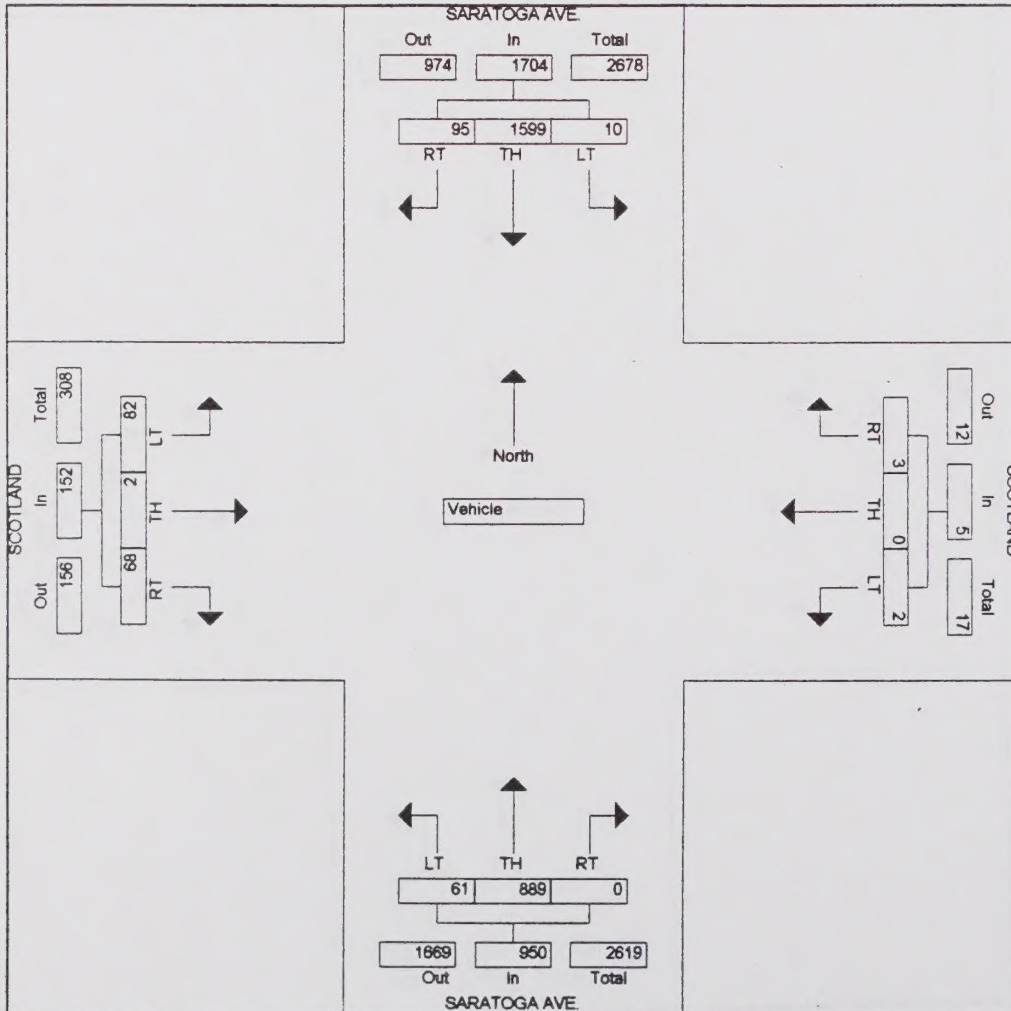
CITY OF SARATOGA

File Name : Saratoga_Scotland_
Site Code : 00000000
Start Date : 09/21/1999
Page : 1

Groups Printed: Vehicle

SARATOGA AVE. Southbound					SCOTLAND Westbound				SARATOGA AVE. Northbound				SCOTLAND Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	20	262	0	282	1	0	1	2	0	258	16	274	27	0	24	51	609
16:15	25	321	1	347	1	0	1	2	1	249	12	262	24	1	24	49	660
16:30	34	343	3	380	1	0	1	2	2	247	21	270	17	0	16	33	685
16:45	16	356	1	373	0	0	2	2	0	193	26	219	27	0	17	44	638
Total	95	1282	5	1382	3	0	5	8	3	947	75	1025	95	1	81	177	2592
17:00	29	347	0	376	1	0	0	1	0	271	20	291	29	0	16	45	713
17:15	15	392	2	409	1	0	1	2	0	202	10	212	16	0	29	45	668
17:30	27	395	2	424	0	0	1	1	0	202	14	216	13	1	21	35	676
17:45	24	465	6	495	1	0	0	1	0	214	17	231	10	1	16	27	754
Total	95	1599	10	1704	3	0	2	5	0	889	61	950	68	2	82	152	2811
Grand Total	190	2881	15	3086	6	0	7	13	3	1836	136	1975	163	3	163	329	5403
Apprch %	6.2	93.4	0.5		46.2	0.0	53.8		0.2	93.0	6.9		49.5	0.9	49.5		
Total %	3.5	53.3	0.3	57.1	0.1	0.0	0.1	0.2	0.1	34.0	2.5	36.6	3.0	0.1	3.0	6.1	

SARATOGA AVE. Southbound					SCOTLAND Westbound				SARATOGA AVE. Northbound				SCOTLAND Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	95	1599	10	1704	3	0	2	5	0	889	61	950	68	2	82	152	2811
Percent	5.6	93.8	0.6		60.0	0.0	40.0		0.0	93.6	6.4		44.7	1.3	53.9		
High Int. 17:45																	17:45
Volume	29	465	6	495	1	0	1	2	0	271	20	291	29	1	29	45	754
Peak Factor				0.861				0.625				0.816				0.844	0.932



Marks Traffic Data Service

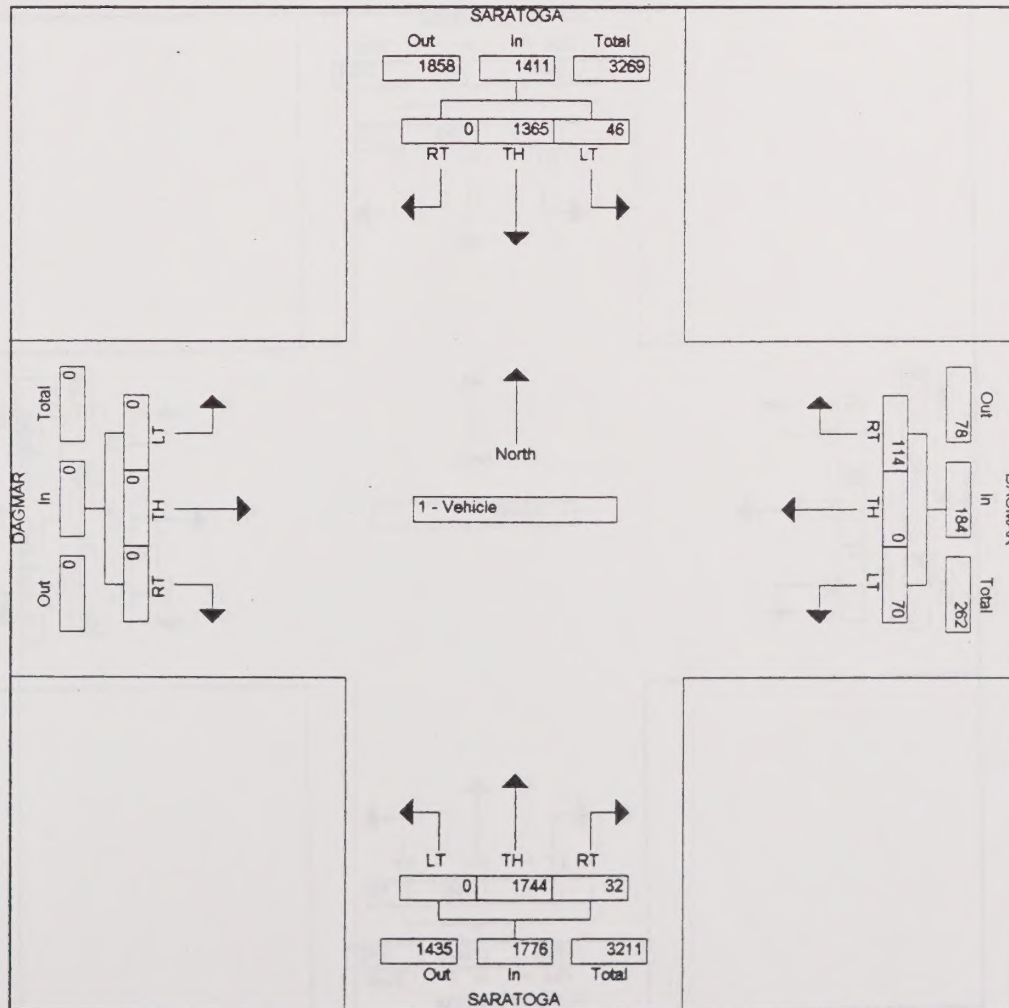
CITY OF SARATOGA

File Name : Saratoga_Dagmar
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: 1 - Vehicle

SARATOGA Southbound					DAGMAR Westbound				SARATOGA Northbound				DAGMAR Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	0	160	5	165	29	0	1	30	6	246	0	252	0	0	0	0	447
07:15	0	227	3	230	23	0	6	29	1	333	0	334	0	0	0	0	593
07:30	0	199	1	200	30	0	9	39	3	326	0	329	0	0	0	0	568
07:45	0	275	7	282	28	0	19	47	3	390	0	393	0	0	0	0	722
Total	0	861	16	877	110	0	35	145	13	1295	0	1308	0	0	0	0	2330
08:00	0	370	9	379	26	0	24	50	7	497	0	504	0	0	0	0	933
08:15	0	377	18	395	36	0	22	58	11	448	0	459	0	0	0	0	912
08:30	0	343	12	355	24	0	5	29	11	409	0	420	0	0	0	0	804
08:45	0	312	12	324	35	0	1	36	5	300	0	305	0	0	0	0	665
Total	0	1402	51	1453	121	0	52	173	34	1654	0	1688	0	0	0	0	3314
Grand Total	0	2263	67	2330	231	0	87	318	47	2949	0	2996	0	0	0	0	5644
Apprch %	0.0	97.1	2.9		72.6	0.0	27.4		1.6	98.4	0.0		0.0	0.0	0.0		
Total %	0.0	40.1	1.2	41.3	4.1	0.0	1.5	5.6	0.8	52.3	0.0	53.1	0.0	0.0	0.0	0.0	

SARATOGA Southbound					DAGMAR Westbound				SARATOGA Northbound				DAGMAR Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	0	1365	46	1411	114	0	70	184	32	1744	0	1776	0	0	0	0	3371
Percent	0.0	96.7	3.3		62.0	0.0	38.0		1.8	98.2	0.0		0.0	0.0	0.0		
High Int. 08:15					08:15				08:00				6:45:00 AM				08:00
Volume	0	377	18	395	36	0	24	58	11	497	0	504	0	0	0	0	933
Peak Factor				0.893				0.793				0.881					0.903



Marks Traffic Data Service

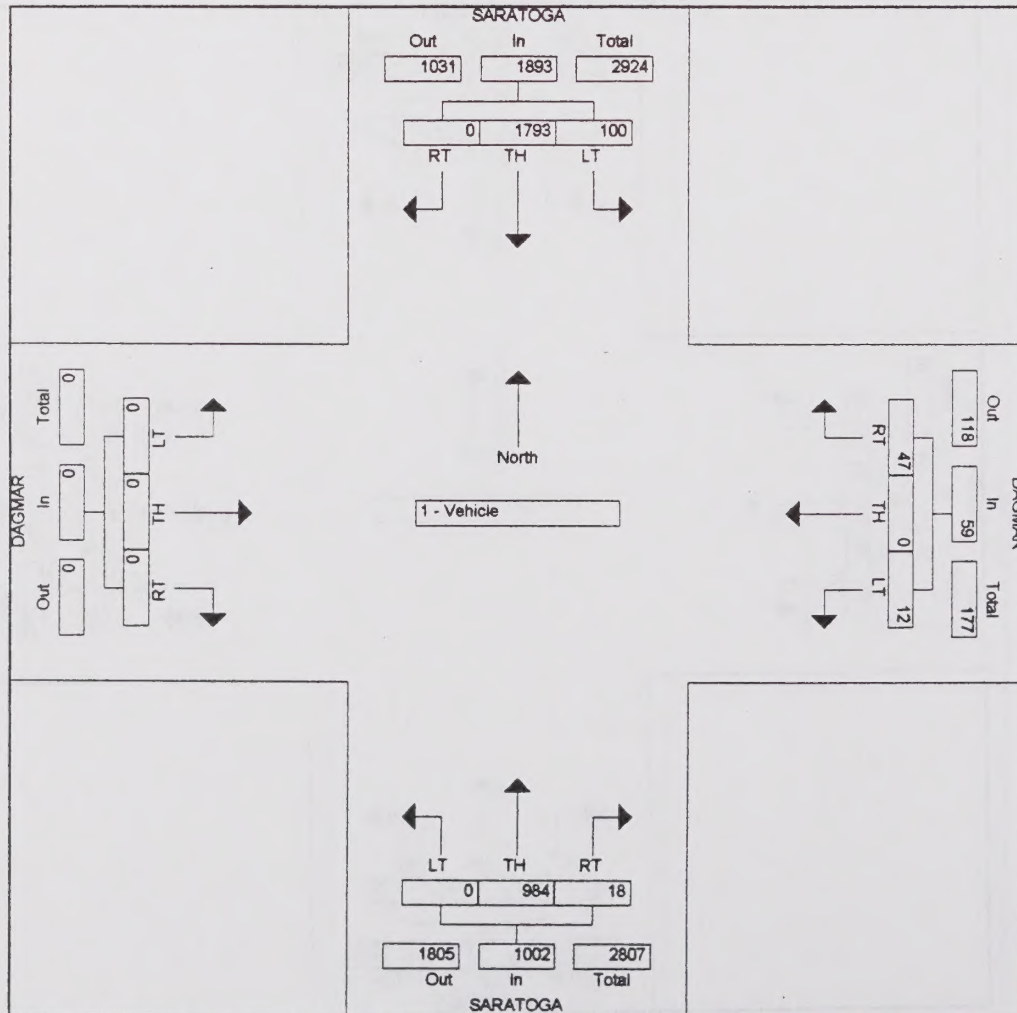
CITY OF SARATOGA

File Name : Saratoga_Dagmar
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: 1 - Vehicle

SARATOGA Southbound					DAGMAR Westbound				SARATOGA Northbound				DAGMAR Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	0	297	24	321	16	0	3	19	3	267	0	270	0	0	0	0	810
16:15	0	314	18	332	17	0	2	19	7	243	0	250	0	0	0	0	801
16:30	0	324	21	345	16	0	2	18	5	267	0	272	0	0	0	0	635
16:45	0	367	19	386	14	0	7	21	9	234	0	243	0	0	0	0	650
Total	0	1302	82	1384	63	0	14	77	24	1011	0	1035	0	0	0	0	2496
17:00	0	412	19	431	12	0	4	16	5	276	0	281	0	0	0	0	728
17:15	0	403	35	438	11	0	1	12	4	241	0	245	0	0	0	0	695
17:30	0	462	26	488	10	0	4	14	6	244	0	250	0	0	0	0	752
17:45	0	516	20	536	14	0	3	17	3	223	0	226	0	0	0	0	779
Total	0	1793	100	1893	47	0	12	59	18	984	0	1002	0	0	0	0	2954
Grand Total	0	3095	182	3277	110	0	26	136	42	1995	0	2037	0	0	0	0	5450
Apprch %	0.0	94.4	5.6		80.9	0.0	19.1		2.1	97.9	0.0		0.0	0.0	0.0		
Total %	0.0	56.8	3.3	60.1	2.0	0.0	0.5	2.5	0.8	36.6	0.0	37.4	0.0	0.0	0.0	0.0	

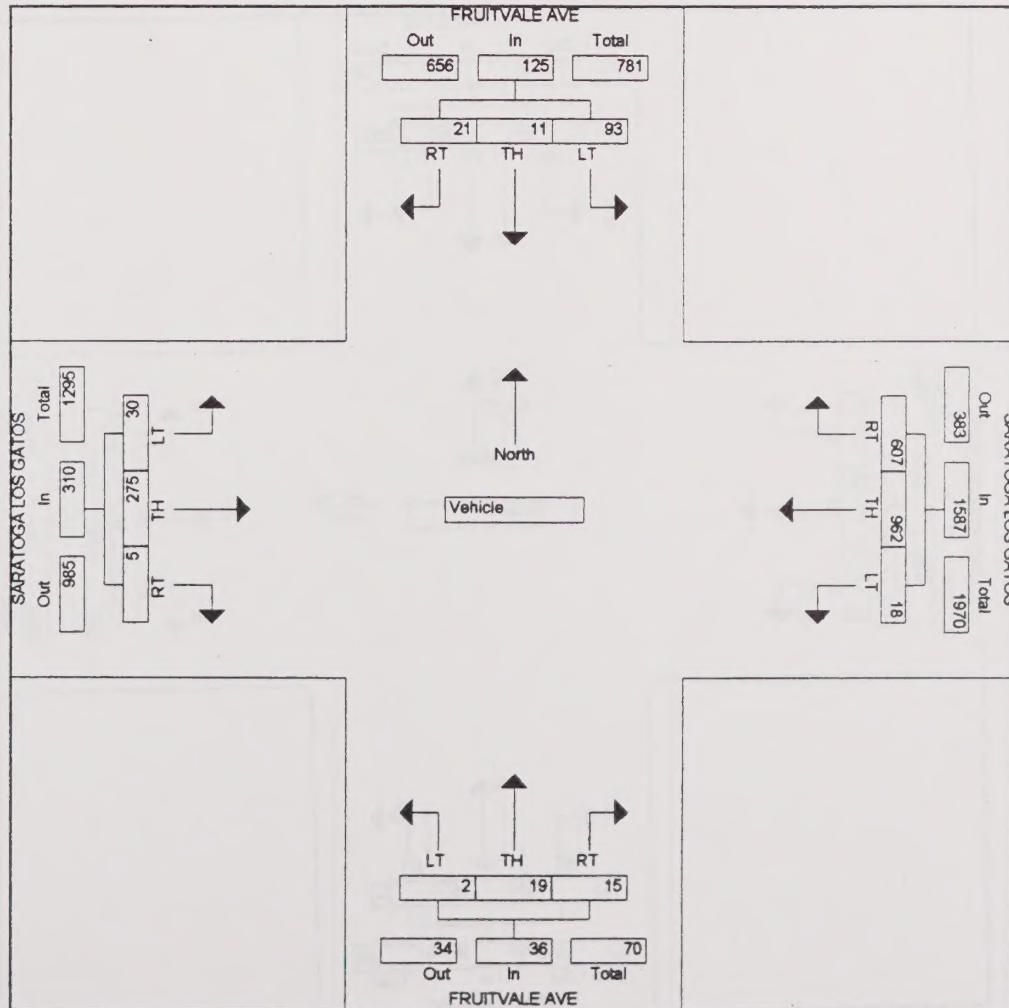
SARATOGA Southbound					DAGMAR Westbound				SARATOGA Northbound				DAGMAR Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	0	1793	100	1893	47	0	12	59	18	984	0	1002	0	0	0	0	2954
Percent	0.0	94.7	5.3		79.7	0.0	20.3		1.8	98.2	0.0		0.0	0.0	0.0		
High Int. 17:45																	17:45
Volume	0	516	35	536	14	0	4	17	6	276	0	281	0	0	0	0	779
Peak Factor				0.883				0.868				0.891					0.948



Groups Printed: Vehicle

	FRUITVALE AVE Southbound				SARATOGA LOS GATOS Westbound				FRUITVALE AVE Northbound				SARATOGA LOS GATOS Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
07:00	1	3	13	17	84	185	2	271	1	4	2	7	3	31	4	38	333
07:15	3	3	12	18	92	206	6	304	3	9	0	12	3	30	7	40	374
07:30	4	3	18	25	116	264	7	387	6	3	3	12	0	58	3	61	485
07:45	2	1	28	31	105	219	6	330	1	8	3	12	1	87	19	107	480
Total	10	10	71	91	397	874	21	1292	11	24	8	43	7	206	33	246	1672
08:00	8	5	22	35	130	232	3	365	3	9	0	12	0	72	7	79	491
08:15	6	1	20	27	136	266	4	406	7	3	1	11	2	72	7	81	525
08:30	4	2	31	37	134	249	3	386	3	5	1	9	1	64	10	75	507
08:45	3	3	20	26	207	215	8	430	2	2	0	4	2	67	6	75	535
Total	21	11	93	125	607	962	18	1587	15	19	2	36	5	275	30	310	2058
Grand Total	31	21	164	216	1004	1836	39	2879	26	43	10	79	12	481	63	556	3730
Apprch %	14.4	9.7	75.9		34.9	63.8	1.4		32.9	54.4	12.7		2.2	86.5	11.3		
Total %	0.8	0.6	4.4	5.8	26.9	49.2	1.0	77.2	0.7	1.2	0.3	2.1	0.3	12.9	1.7	14.9	

	FRUITVALE AVE Southbound				SARATOGA LOS GATOS Westbound				FRUITVALE AVE Northbound				SARATOGA LOS GATOS Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 08:00																	
Volume	21	11	93	125	607	962	18	1587	15	19	2	36	5	275	30	310	2058
Percent	16.8	8.8	74.4		38.2	60.6	1.1		41.7	52.8	5.6		1.6	88.7	9.7		
High Int. 08:30					08:45				08:00				08:15				08:45
Volume	8	5	31	37	207	266	8	430	7	9	1	12	2	72	10	81	535
Peak Factor				0.845				0.923				0.750				0.957	0.962



Marks Traffic Data Service

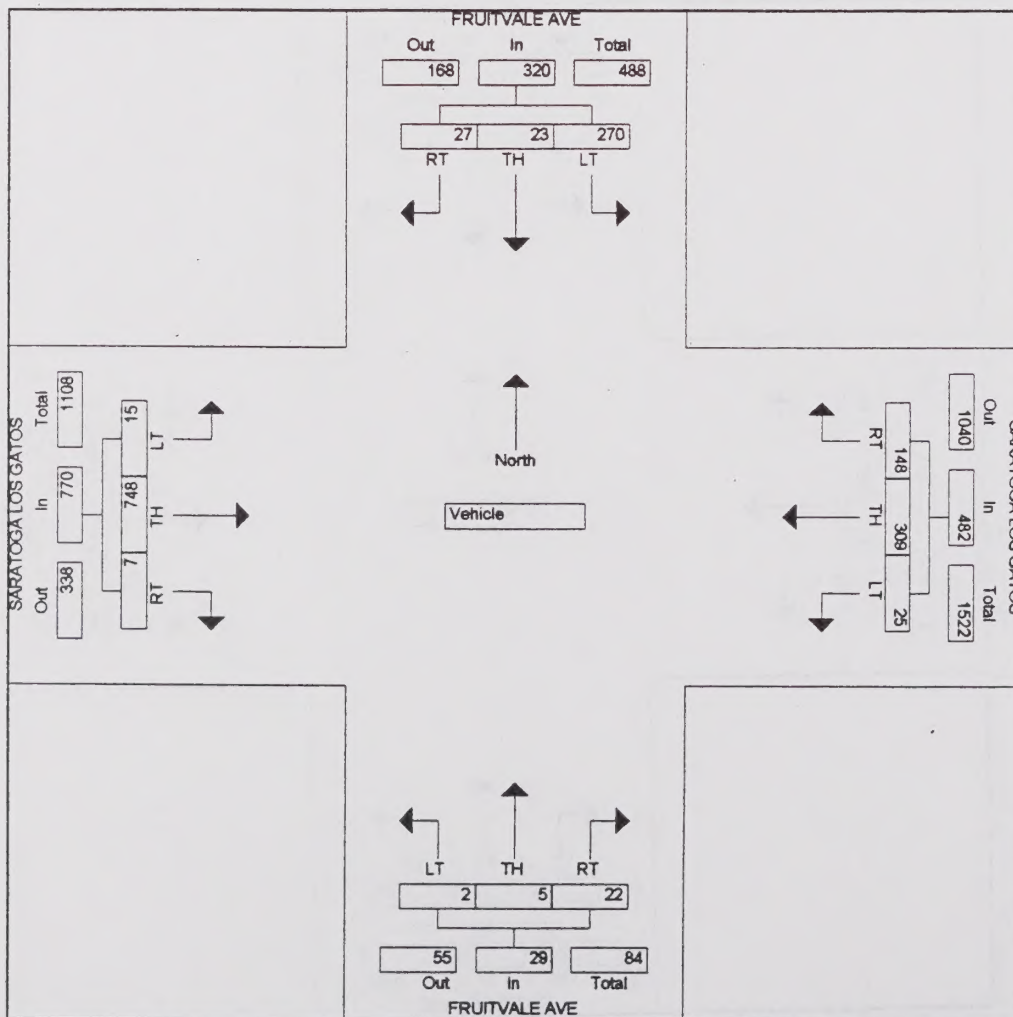
CITY OF SARATOGA

File Name : Fruitvale_Saratoga_Gatos.
 Site Code : 00000000
 Start Date : 09/21/1999
 Page : 1

Groups Printed: Vehicle

	FRUITVALE AVE Southbound				SARATOGA LOS GATOS Westbound				FRUITVALE AVE Northbound				SARATOGA LOS GATOS Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	6	2	58	66	22	73	4	99	4	3	1	8	1	171	1	173	346
16:15	6	1	75	82	28	76	6	110	2	5	2	9	0	170	4	174	375
16:30	8	0	74	82	21	74	8	103	8	0	0	8	1	145	2	148	341
16:45	8	6	64	78	48	73	10	131	6	4	0	10	2	167	3	172	391
Total	28	9	271	308	119	296	28	443	20	12	3	35	4	653	10	667	1453
17:00	8	3	79	90	39	70	8	117	8	0	0	8	2	201	1	204	419
17:15	8	6	65	79	31	91	6	128	5	0	1	6	1	182	3	186	399
17:30	3	8	62	73	30	75	1	106	3	1	1	5	2	198	8	208	392
17:45	5	3	55	63	51	85	6	142	3	3	0	6	3	168	5	176	387
Total	24	20	261	305	151	321	21	493	19	4	2	25	8	749	17	774	1597
Grand Total	52	29	532	613	270	617	49	936	39	16	5	60	12	1402	27	1441	3050
Apprch %	8.5	4.7	86.8		28.8	65.9	5.2		65.0	26.7	8.3		0.8	97.3	1.9		
Total %	1.7	1.0	17.4	20.1	8.9	20.2	1.6	30.7	1.3	0.5	0.2	2.0	0.4	46.0	0.9	47.2	

	FRUITVALE AVE Southbound				SARATOGA LOS GATOS Westbound				FRUITVALE AVE Northbound				SARATOGA LOS GATOS Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 16:45																	
Volume	27	23	270	320	148	309	25	482	22	5	2	29	7	748	15	770	1601
Percent	8.4	7.2	84.4		30.7	64.1	5.2		75.9	17.2	6.9		0.9	97.1	1.9		
High Int. 17:00					16:45				16:45				17:30				17:00
Volume	8	8	79	90	48	91	10	131	8	4	1	10	2	201	8	208	419
Peak Factor				0.889				0.920				0.725				0.925	0.955



Marks Traffic Data Service

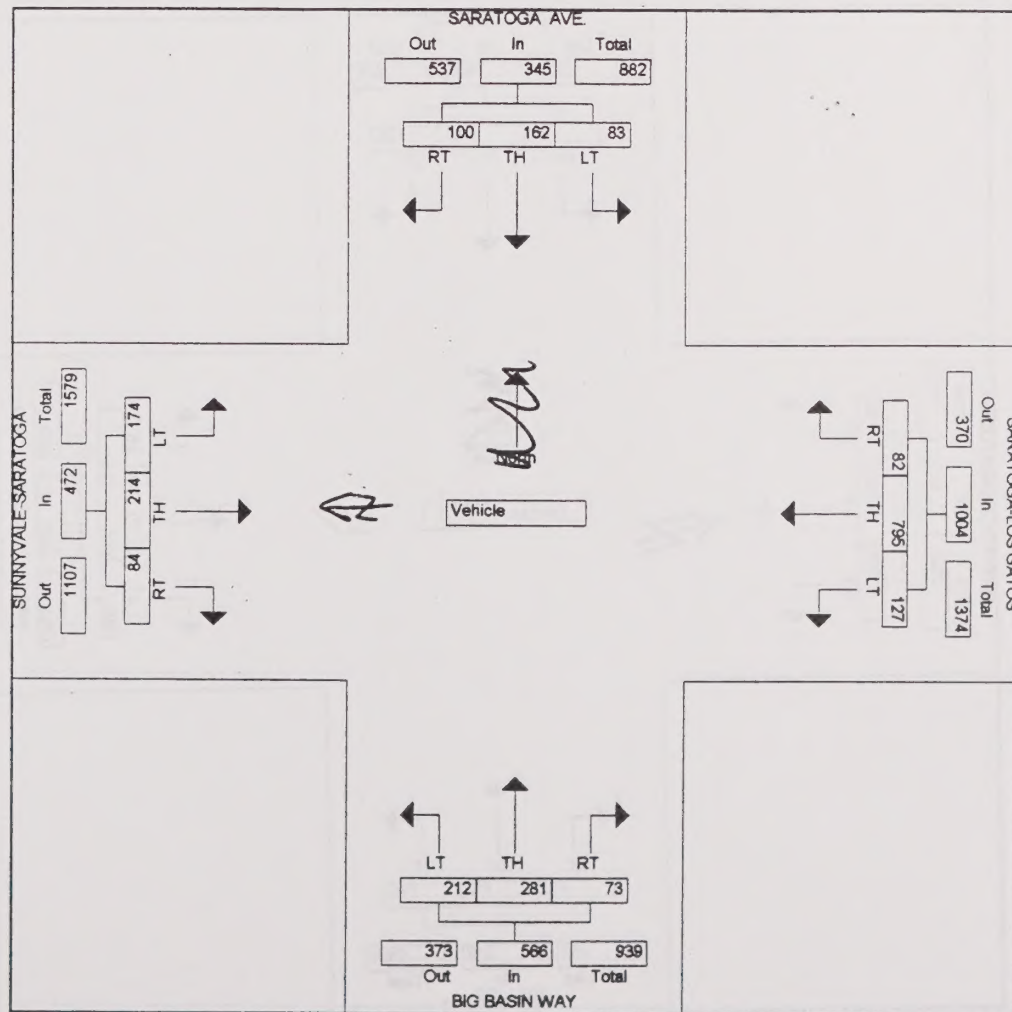
CITY OF SARATOGA

File Name : Sara_Sunny_Los Gatos_Basin
 Site Code : 00000000
 Start Date : 09/15/1999
 Page : 1

Groups Printed: Vehicle

Start Time	SARATOGA AVE. Westbound				SARATOGA-LOS GATOS Northbound				BIG BASIN WAY Eastbound				SUNNYVALE-SARATOGA Southbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	22	13	13	48	25	136	16	177	10	75	43	128	10	29	9	48	401
07:15	17	20	4	41	18	187	24	229	8	99	45	152	10	19	17	46	468
07:30	18	23	8	49	11	226	17	254	10	108	61	179	13	43	27	83	565
07:45	35	35	14	84	14	203	13	230	26	89	64	179	21	83	71	175	668
Total	92	91	39	222	68	752	70	890	54	371	213	638	54	174	124	352	2102
08:00	21	35	18	74	20	213	38	271	19	65	40	124	23	25	38	86	555
08:15	24	48	25	97	22	201	38	261	12	52	52	116	22	57	28	107	581
08:30	20	44	26	90	26	178	38	242	16	75	56	147	18	49	37	104	583
08:45	17	54	18	89	36	169	33	238	22	55	35	112	22	46	27	95	534
Total	82	181	87	350	104	761	147	1012	69	247	183	499	85	177	130	392	2253
Grand Total	174	272	126	572	172	1513	217	1902	123	618	396	1137	139	351	254	744	4355
Apprch %	30.4	47.6	22.0		9.0	79.5	11.4		10.8	54.4	34.8		18.7	47.2	34.1		
Total %	4.0	6.2	2.9	13.1	3.9	34.7	5.0	43.7	2.8	14.2	9.1	26.1	3.2	8.1	5.8	17.1	

Start Time	SARATOGA AVE. Southbound				SARATOGA-LOS GATOS Westbound				BIG BASIN WAY Northbound				SUNNYVALE-SARATOGA Eastbound				Int. Total
	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	100	162	83	345	82	795	127	1004	73	281	212	566	84	214	174	472	2387
Percent	29.0	47.0	24.1		8.2	79.2	12.6		12.9	49.6	37.5		17.8	45.3	36.9		
High Int. 08:15					08:00				07:45				07:45				07:45
Volume	35	48	26	97	26	213	38	271	26	89	64	179	23	83	71	175	668
Peak Factor				0.889				0.926				0.791				0.674	0.893



Marks Traffic Data Service

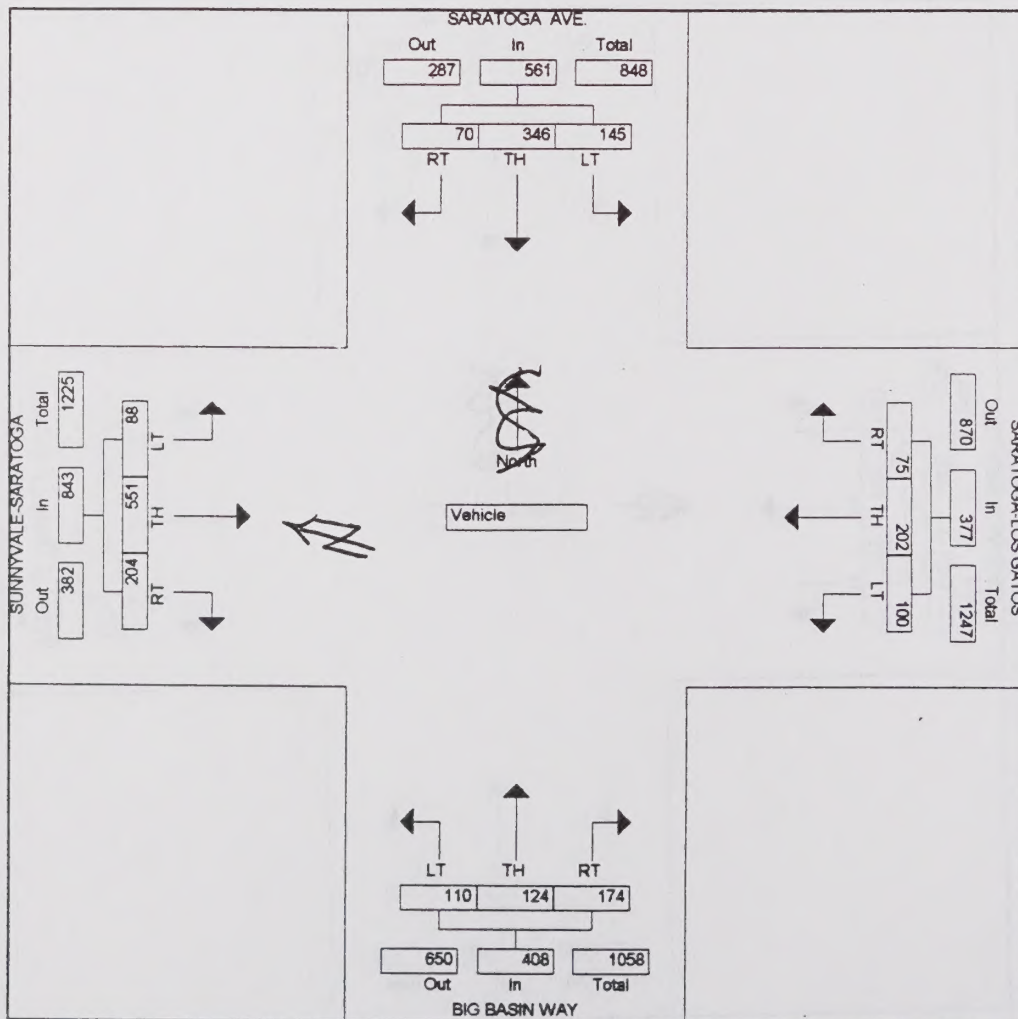
CITY OF SARATOGA

File Name : Sara_Sunny_Los Gatos_Basin_
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

SARATOGA AVE. <i>West Southbound</i>					SARATOGA-LOS GATOS <i>North Westbound</i>				BIG BASIN WAY <i>East Northbound</i>				SUNNYVALE-SARATOGA <i>South Eastbound</i>				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
16:00	12	74	29	115	17	60	32	109	55	31	40	126	53	114	15	182	532
16:15	13	82	34	129	17	44	24	85	53	37	29	119	48	104	16	168	501
16:30	15	101	28	144	24	58	25	107	42	21	31	94	43	117	30	190	535
16:45	13	81	24	118	19	42	38	99	44	35	30	109	35	87	17	139	465
Total	53	338	115	506	77	204	119	400	194	124	130	448	179	422	78	679	2033
17:00	16	71	37	124	24	51	15	90	48	38	30	116	41	132	32	205	535
17:15	26	107	41	174	21	56	31	108	48	29	33	110	46	118	14	178	570
17:30	16	71	30	117	9	54	32	95	41	26	18	85	59	173	19	251	548
17:45	12	97	37	146	21	41	22	84	37	31	29	97	58	128	23	209	536
Total	70	346	145	561	75	202	100	377	174	124	110	408	204	551	88	843	2189
Grand Total	123	684	260	1067	152	406	219	777	368	248	240	856	383	973	166	1522	4222
Apprch %	11.5	64.1	24.4		19.6	52.3	28.2		43.0	29.0	28.0		25.2	63.9	10.9		
Total %	2.9	16.2	6.2	25.3	3.6	9.6	5.2	18.4	8.7	5.9	5.7	20.3	9.1	23.0	3.9	36.0	

SARATOGA AVE. Southbound					SARATOGA-LOS GATOS Westbound				BIG BASIN WAY Northbound				SUNNYVALE-SARATOGA Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	70	346	145	561	75	202	100	377	174	124	110	408	204	551	88	843	2189
Percent	12.5	61.7	25.8		19.9	53.6	26.5		42.6	30.4	27.0		24.2	65.4	10.4		
High Int. 17:15					17:15				17:00				17:30				17:15
Volume	26	107	41	174	24	56	32	108	48	38	33	116	59	173	32	251	570
Peak Factor				0.806				0.873				0.879				0.840	0.960



Marks Traffic Data Service

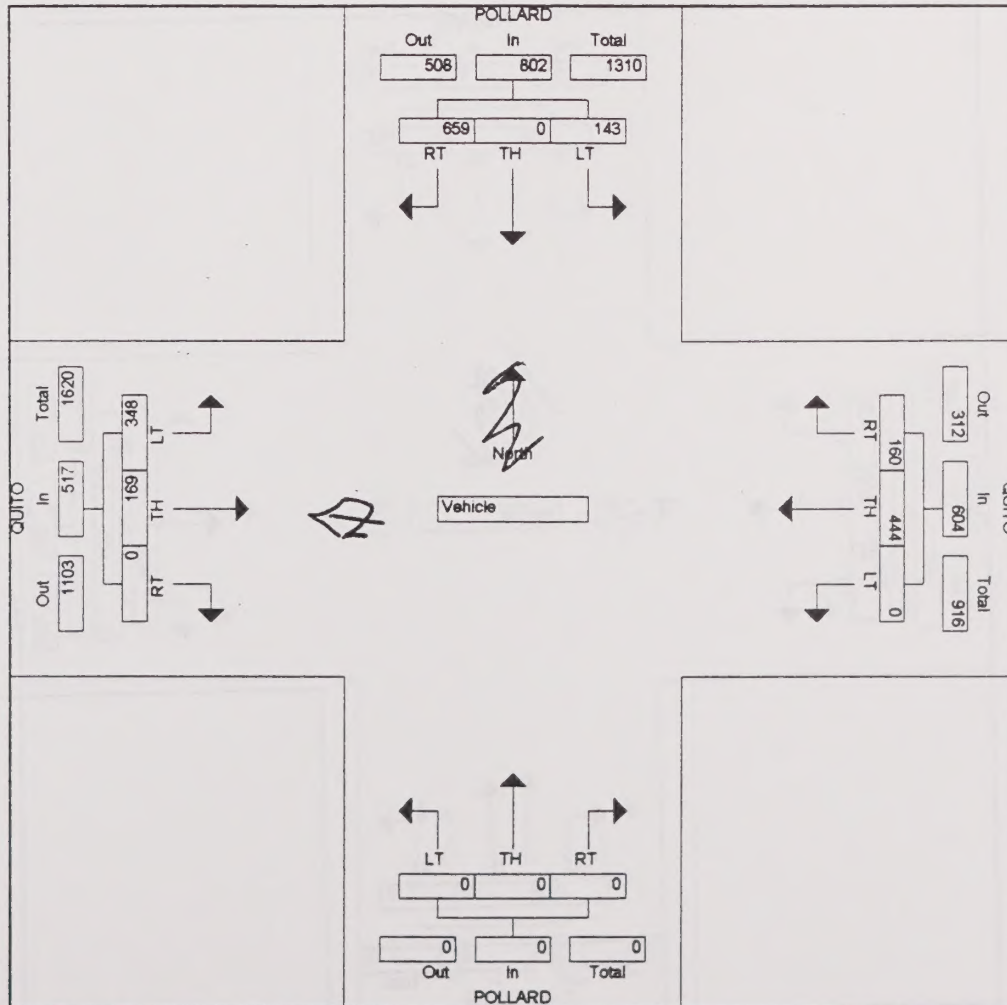
CITY OF SARATOGA

File Name : Quito_Pollard
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

	POLLARD Southbound				QUITO Westbound				POLLARD Northbound				QUITO Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	113	0	7	120	14	84	0	98	0	0	0	0	0	9	23	32	250
07:15	122	0	11	133	18	122	0	140	0	0	0	0	0	18	33	51	324
07:30	140	0	17	157	16	122	0	138	0	0	0	0	0	30	51	81	376
07:45	185	0	25	210	34	117	0	151	0	0	0	0	0	38	98	136	497
Total	560	0	60	620	82	445	0	527	0	0	0	0	0	95	205	300	1447
08:00	203	0	82	285	55	91	0	146	0	0	0	0	0	44	90	134	565
08:15	146	0	18	164	45	119	0	164	0	0	0	0	0	35	113	148	476
08:30	125	0	18	143	26	117	0	143	0	0	0	0	0	52	47	99	385
08:45	154	0	11	165	18	96	0	114	0	0	0	0	0	45	57	102	381
Total	628	0	129	757	144	423	0	567	0	0	0	0	0	176	307	483	1807
Grand Total	1188	0	189	1377	226	868	0	1094	0	0	0	0	0	271	512	783	3254
Apprch %	86.3	0.0	13.7		20.7	79.3	0.0		0.0	0.0	0.0		0.0	34.6	65.4		
Total %	36.5	0.0	5.8	42.3	6.9	26.7	0.0	33.6	0.0	0.0	0.0	0.0	0.0	8.3	15.7	24.1	

	POLLARD Southbound				QUITO Westbound				POLLARD Northbound				QUITO Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	659	0	143	802	160	444	0	604	0	0	0	0	0	169	348	517	1923
Percent	82.2	0.0	17.8		26.5	73.5	0.0		0.0	0.0	0.0		0.0	32.7	67.3		
High Int. 08:00					08:15				6:45:00 AM				08:15				08:00
Volume	203	0	82	285	55	119	0	164	0	0	0	0	0	52	113	148	565
Peak Factor				0.704				0.921								0.873	0.851



Marks Traffic Data Service

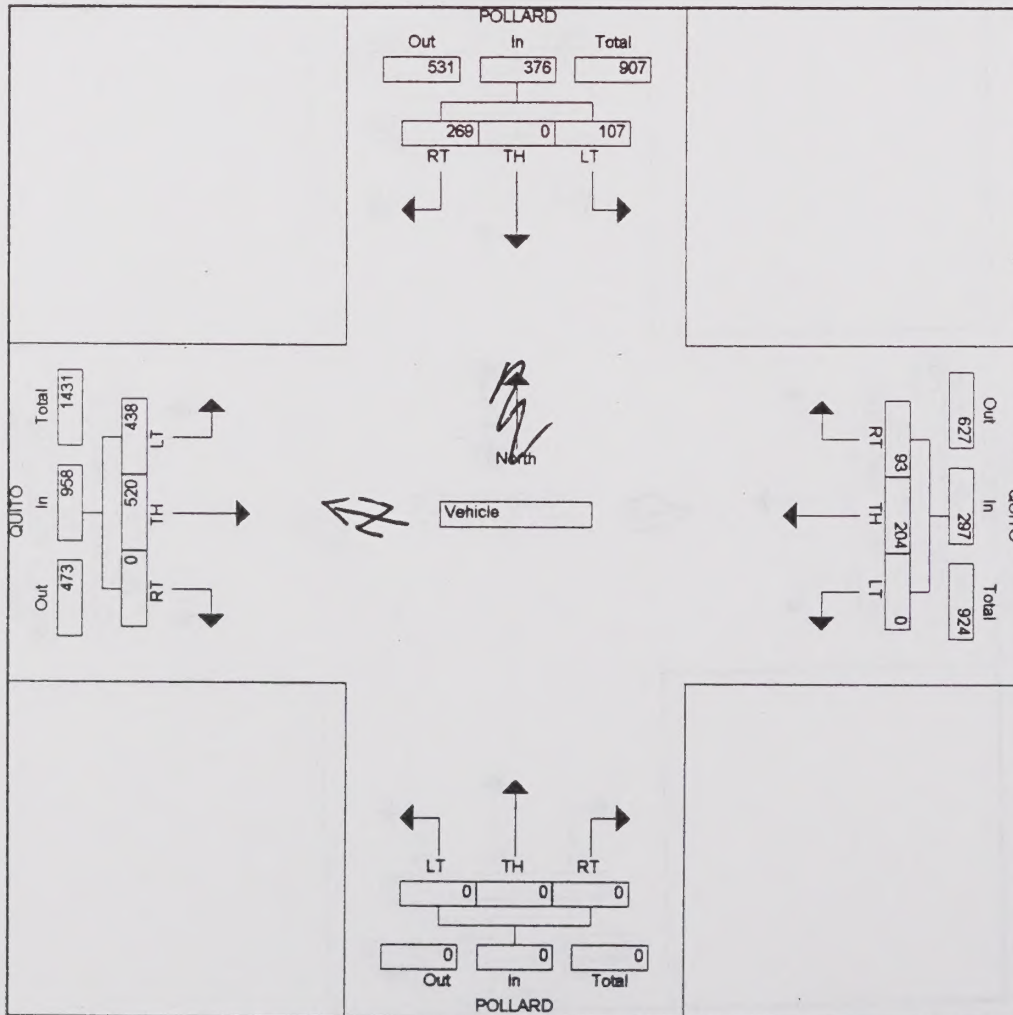
CITY OF SARATOGA

File Name : Quito_Pollard
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

POLLARD Southbound					QUITO Westbound				POLLARD Northbound				QUITO Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	49	0	19	68	11	47	0	58	0	0	0	0	0	86	83	169	295
16:15	44	0	27	71	25	52	0	77	0	0	0	0	0	95	104	199	347
16:30	68	0	22	90	21	57	0	78	0	0	0	0	0	89	98	187	355
16:45	75	0	23	98	18	45	0	63	0	0	0	0	0	94	114	208	369
Total	236	0	91	327	75	201	0	276	0	0	0	0	0	364	399	763	1366
17:00	75	0	25	100	21	52	0	73	0	0	0	0	0	123	98	221	394
17:15	59	0	24	83	22	57	0	79	0	0	0	0	0	141	106	247	408
17:30	65	0	36	101	29	53	0	82	0	0	0	0	0	130	111	241	424
17:45	70	0	22	92	21	42	0	63	0	0	0	0	0	126	123	249	404
Total	269	0	107	376	93	204	0	297	0	0	0	0	0	520	438	958	1631
Grand Total	505	0	198	703	168	405	0	573	0	0	0	0	0	884	837	1721	2997
Apprch %	71.8	0.0	28.2		29.3	70.7	0.0		0.0	0.0	0.0		0.0	51.4	48.6		
Total %	16.9	0.0	6.6	23.5	5.6	13.5	0.0	19.1	0.0	0.0	0.0	0.0	0.0	29.5	27.9	57.4	

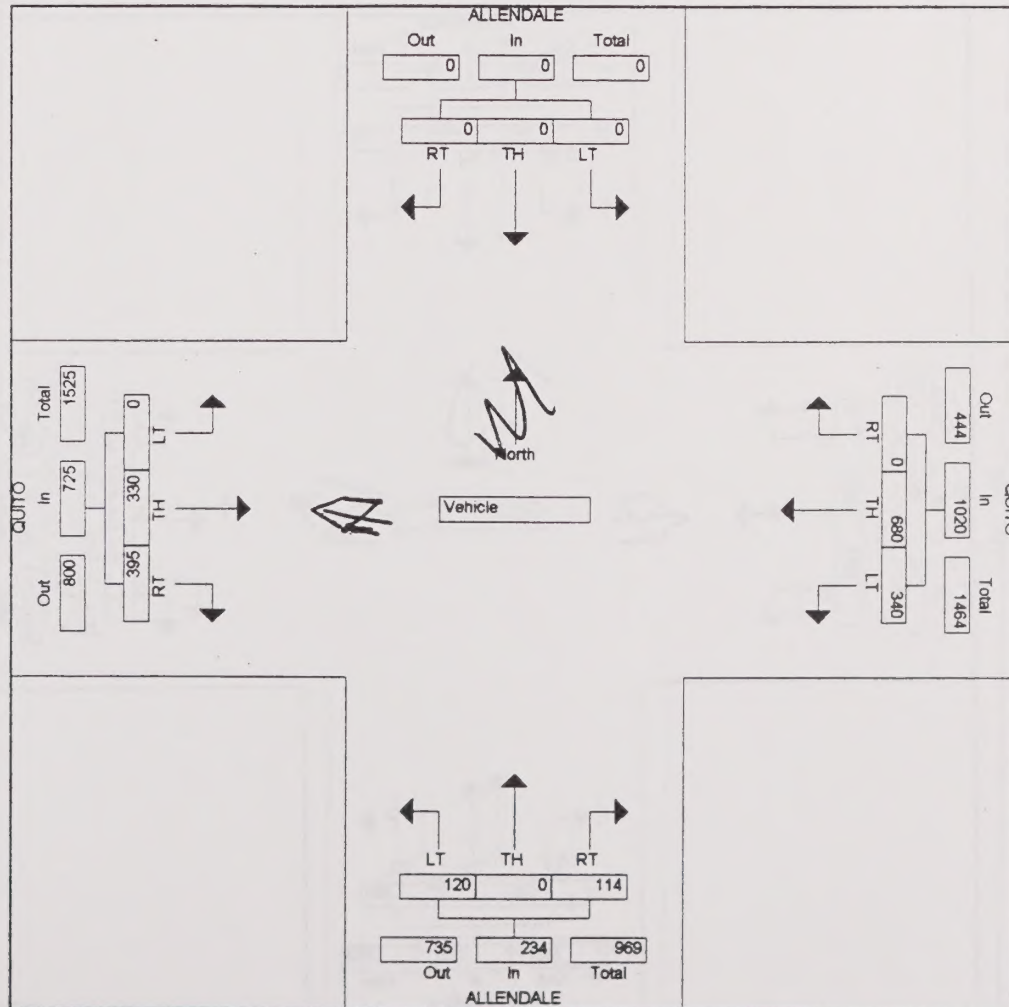
	POLLARD Southbound				QUITO Westbound				POLLARD Northbound				QUITO Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From Intersection	16:00 to 17:45 - Peak 1 of 1																
Volume	269	0	107	376	93	204	0	297	0	0	0	0	0	520	438	958	1631
Percent	71.5	0.0	28.5		31.3	68.7	0.0		0.0	0.0	0.0		0.0	54.3	45.7		
High Int.	17:30				17:30				3:45:00 PM				17:45				17:30
Volume	75	0	36	101	29	57	0	82	0	0	0	0	0	141	123	249	424
Peak Factor				0.931				0.905								0.962	0.962



Groups Printed: Vehicle

	ALLENDALE Southbound				QUITO <i>North</i> Westbound				<i>East</i> Northbound ALLENDALE				QUITO <i>South</i> Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
07:00	0	0	0	0	0	154	37	191	10	0	10	20	28	23	0	51	262
07:15	0	0	0	0	0	184	51	235	12	0	25	37	66	41	0	107	379
07:30	0	0	0	0	0	206	46	252	18	0	41	59	21	67	0	88	399
07:45	0	0	0	0	0	198	74	272	19	0	28	47	42	118	0	160	479
Total	0	0	0	0	0	742	208	950	59	0	104	163	157	249	0	406	1519
08:00	0	0	0	0	0	159	72	231	30	0	28	58	62	147	0	209	498
08:15	0	0	0	0	0	193	95	288	29	0	31	60	82	61	0	143	491
08:30	0	0	0	0	0	171	68	239	26	0	26	52	110	64	0	174	465
08:45	0	0	0	0	0	157	105	262	29	0	35	64	141	58	0	199	525
Total	0	0	0	0	0	680	340	1020	114	0	120	234	395	330	0	725	1979
Grand Total	0	0	0	0	0	1422	548	1970	173	0	224	397	552	579	0	1131	3498
Apprch %	0.0	0.0	0.0		0.0	72.2	27.8		43.6	0.0	56.4		48.8	51.2	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	40.7	15.7	56.3	4.9	0.0	6.4	11.3	15.8	16.6	0.0	32.3	

	ALLENDALE Southbound				QUITO Westbound				ALLENDALE Northbound				QUITO Eastbound				Int.
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Total
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 08:00																	
Volume	0	0	0	0	0	680	340	1020	114	0	120	234	395	330	0	725	1979
Percent	0.0	0.0	0.0		0.0	66.7	33.3		48.7	0.0	51.3		54.5	45.5	0.0		
High Int. 6:45:00 AM					08:15				08:45				08:00				08:45
Volume	0	0	0	0	0	193	105	288	30	0	35	64	141	147	0	209	525
Peak Factor								0.885				0.914				0.867	0.942



Marks Traffic Data Service

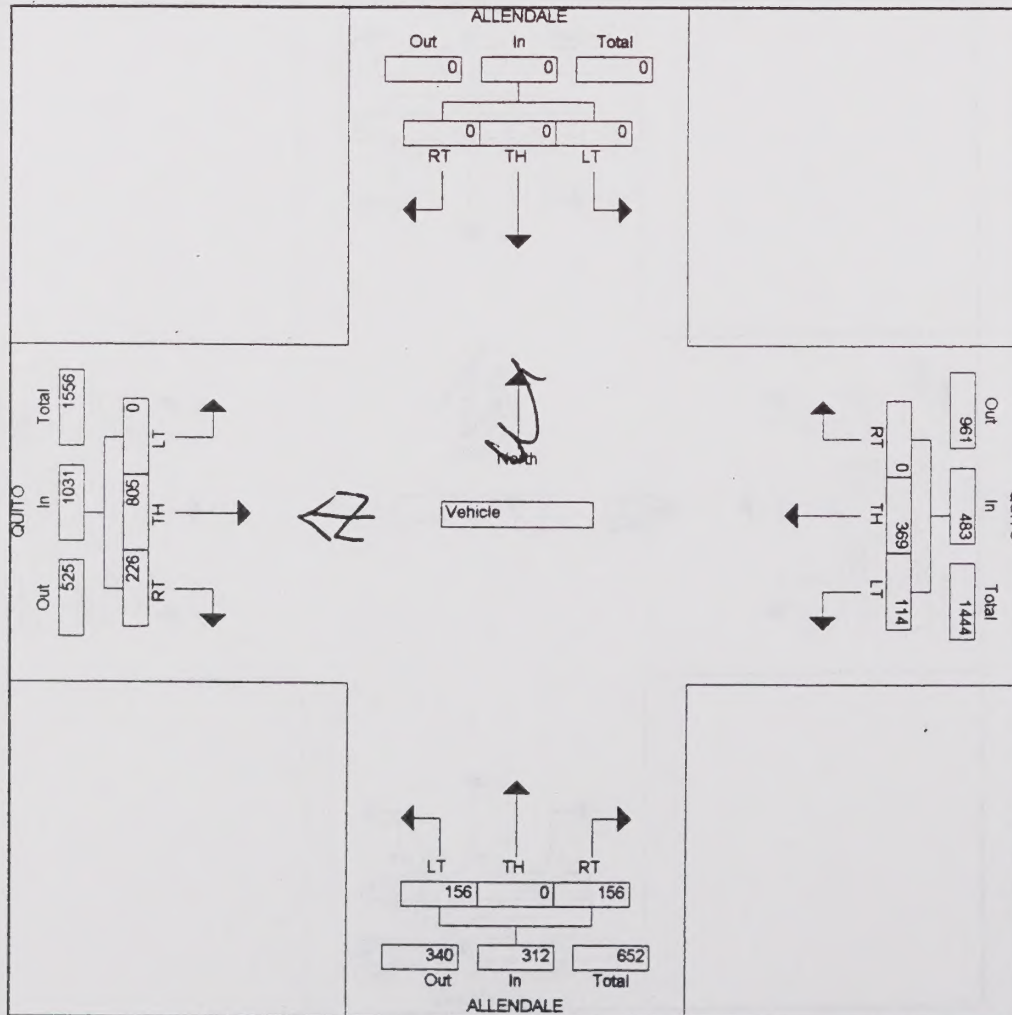
CITY OF SARATOGA

File Name : Quito_Allendale.
Site Code : 00000000
Start Date : 09/16/1999
Page : 1

Groups Printed: Vehicle

	ALLENDALE Southbound				QUITO Westbound				ALLENDALE Northbound				QUITO Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	0	0	0	0	79	22	101	27	0	31	58	34	132	0	166	325
16:15	0	0	0	0	0	76	20	96	53	0	28	81	39	139	0	178	355
16:30	0	0	0	0	0	94	26	120	33	0	47	80	29	155	0	184	384
16:45	0	0	0	0	0	83	32	115	34	0	33	67	29	181	0	210	392
Total	0	0	0	0	0	332	100	432	147	0	139	286	131	607	0	738	1455
17:00	0	0	0	0	0	110	24	134	35	0	45	80	49	180	0	229	443
17:15	0	0	0	0	0	88	23	111	44	0	39	83	69	185	0	254	448
17:30	0	0	0	0	0	89	36	125	27	0	33	60	49	244	0	293	478
17:45	0	0	0	0	0	82	31	113	50	0	39	89	59	196	0	255	457
Total	0	0	0	0	0	369	114	483	156	0	156	312	226	805	0	1031	1826
Grand Total	0	0	0	0	0	701	214	915	303	0	295	598	357	1412	0	1769	3282
Apprch %	0.0	0.0	0.0		0.0	76.6	23.4		50.7	0.0	49.3		20.2	79.8	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	21.4	6.5	27.9	9.2	0.0	9.0	18.2	10.9	43.0	0.0	53.9	

	ALLENDALE Southbound				QUITO Westbound				ALLENDALE Northbound				QUITO Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From 16:00 to 17:45 - Peak 1 of 1 Intersection 17:00																	
Volume	0	0	0	0	0	369	114	483	156	0	156	312	226	805	0	1031	1826
Percent	0.0	0.0	0.0		0.0	76.4	23.6		50.0	0.0	50.0		21.9	78.1	0.0		
High Int. 3:45:00 PM					17:00				17:45				17:30				17:30
Volume	0	0	0	0	0	110	36	134	50	0	45	89	69	244	0	293	478
Peak Factor					0.901				0.876				0.880				0.955



CITY OF SARATOGA

File Name : Fruitvale_Allendale_

Site Code : 00000000

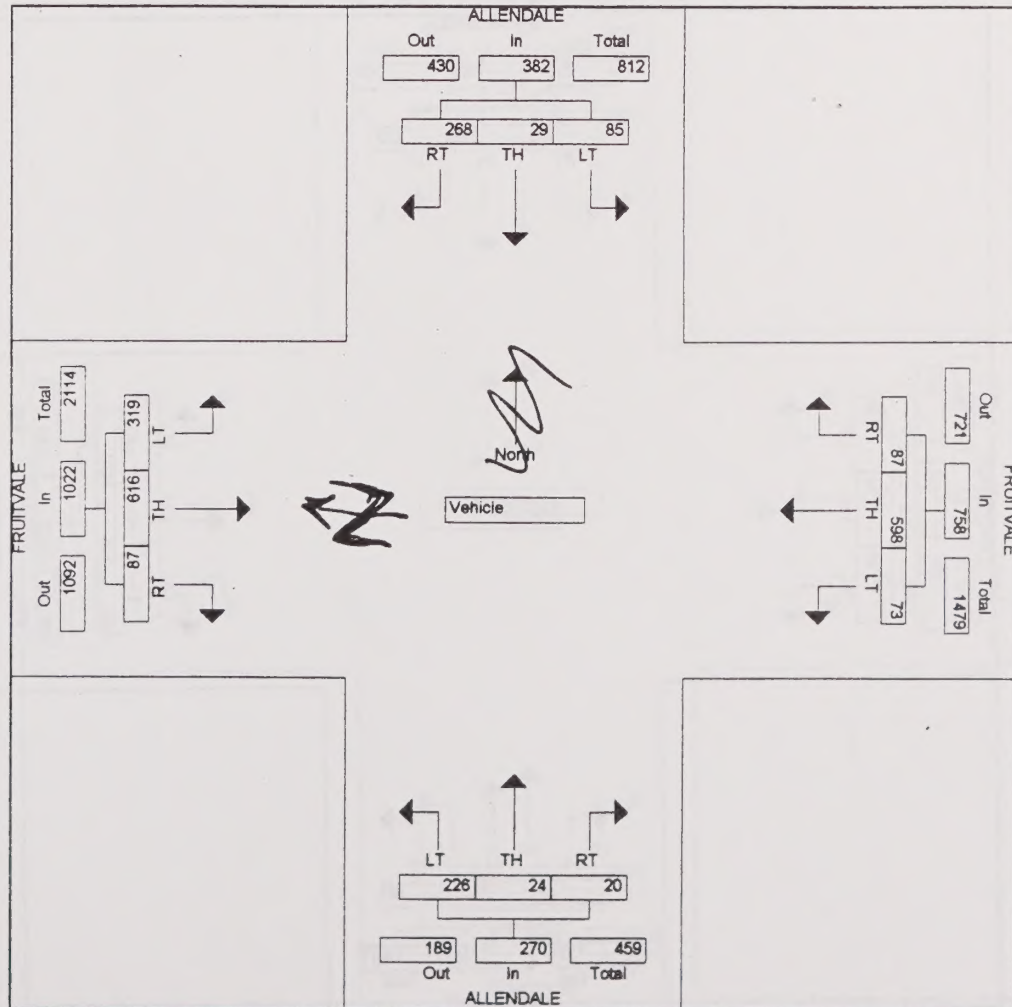
Start Date : 09/15/1999

Page : 1

Groups Printed: Vehicle

	ALLENDALE Southbound				FRUITVALE Westbound				ALLENDALE Northbound				FRUITVALE Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
07:00	34	3	13	50	14	95	6	115	3	4	21	28	9	92	38	139	332
07:15	55	5	22	82	35	92	9	136	8	9	56	73	10	153	89	252	543
07:30	77	7	37	121	30	92	4	126	4	3	28	35	9	69	58	136	418
07:45	72	8	28	108	15	146	27	188	7	9	82	98	25	179	57	261	655
Total	238	23	100	361	94	425	46	565	22	25	187	234	53	493	242	788	1948
08:00	51	10	31	92	21	217	35	273	9	7	97	113	28	179	84	291	769
08:15	95	3	15	113	30	142	4	176	3	4	30	37	14	129	95	238	564
08:30	50	8	11	69	21	93	7	121	1	4	17	22	20	129	83	232	444
08:45	47	10	13	70	19	83	17	119	7	5	10	22	25	106	99	230	441
Total	243	31	70	344	91	535	63	689	20	20	154	194	87	543	361	991	2218
Grand Total	481	54	170	705	185	960	109	1254	42	45	341	428	140	1036	603	1779	4166
Apprch %	68.2	7.7	24.1		14.8	76.6	8.7		9.8	10.5	79.7		7.9	58.2	33.9		
Total %	11.5	1.3	4.1	16.9	4.4	23.0	2.6	30.1	1.0	1.1	8.2	10.3	3.4	24.9	14.5	42.7	

	ALLENDALE Southbound				FRUITVALE Westbound				ALLENDALE Northbound				FRUITVALE Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	268	29	85	382	87	598	73	758	20	24	226	270	87	616	319	1022	2432
Percent	70.2	7.6	22.3		11.5	78.9	9.6		7.4	8.9	83.7		8.5	60.3	31.2		
High Int. 08:15					08:00				08:00				08:00				08:00
Volume	95	10	31	113	30	217	35	273	9	9	97	113	28	179	95	291	769
Peak Factor				0.845				0.694				0.597				0.878	0.791



Marks Traffic Data Service

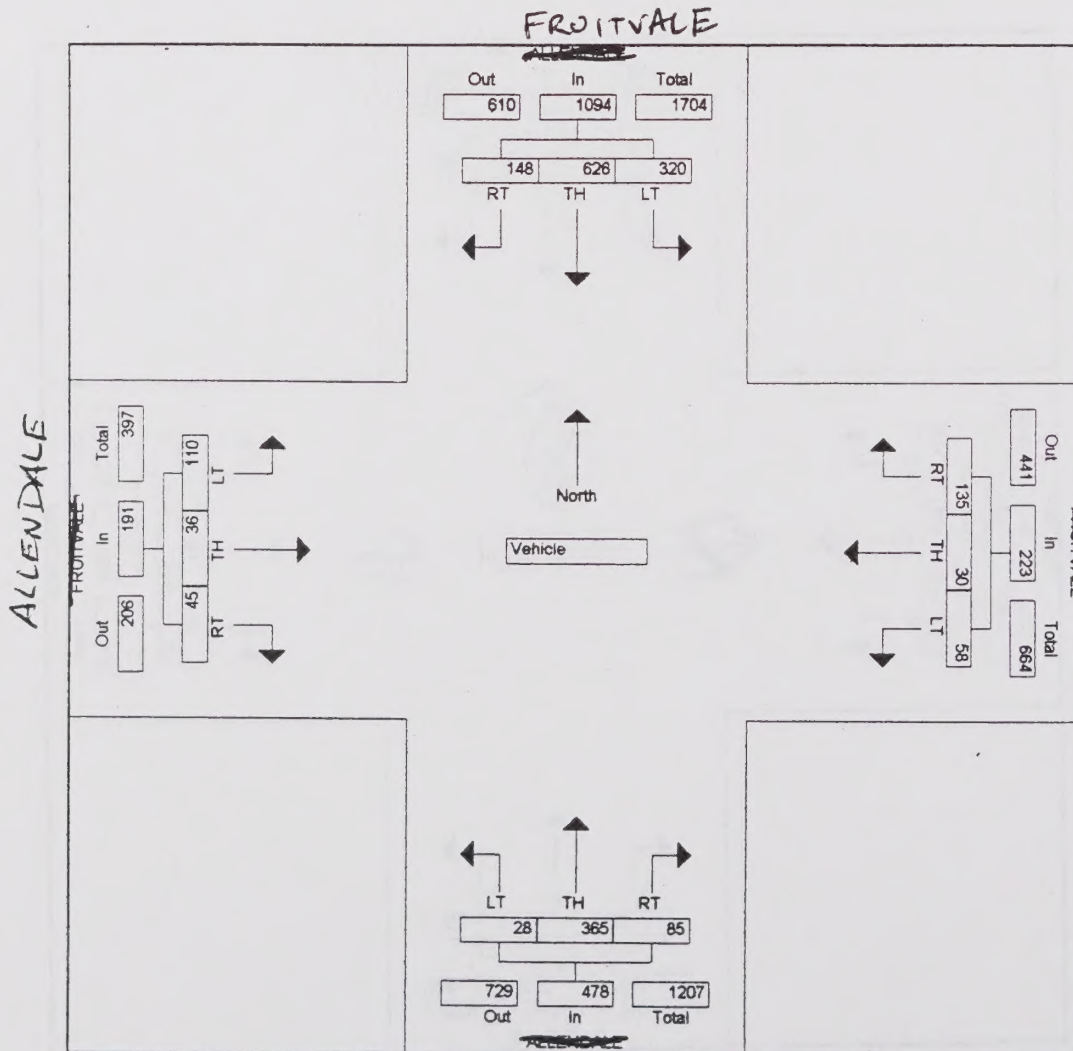
CITY OF SARATOGA

File Name : Fruitvale_Allendale_
Site Code : 00000000
Start Date : 09/15/1999
Page : 1

Groups Printed: Vehicle

	ALLENDALE Southbound				FRUITVALE Westbound				ALLENDALE Northbound				FRUITVALE Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	29	109	48	186	41	9	9	59	16	98	13	127	8	8	28	44	416
16:15	29	98	46	173	45	7	12	64	20	86	16	122	9	8	29	46	405
16:30	38	116	52	206	37	8	13	58	13	71	12	96	23	18	49	90	450
16:45	52	130	60	242	37	8	12	57	13	95	15	123	13	14	35	62	484
Total	148	453	206	807	160	32	46	238	62	350	56	468	53	48	141	242	1755
17:00	56	150	61	267	36	10	12	58	22	82	14	118	16	9	42	67	510
17:15	35	151	61	247	23	9	7	39	14	99	5	118	9	7	23	39	443
17:30	30	146	77	253	30	5	16	51	28	84	7	119	12	16	26	54	477
17:45	27	179	121	327	46	6	23	75	21	100	2	123	8	4	19	31	556
Total	148	626	320	1094	135	30	58	223	85	365	28	478	45	36	110	191	1986
Grand Total	296	1079	526	1901	295	62	104	461	147	715	84	946	98	84	251	433	3741
Apprch %	15.6	56.8	27.7		64.0	13.4	22.6		15.5	75.6	8.9		22.6	19.4	58.0		
Total %	7.9	28.8	14.1	50.8	7.9	1.7	2.8	12.3	3.9	19.1	2.2	25.3	2.6	2.2	6.7	11.6	

	ALLENDALE Southbound				FRUITVALE Westbound				ALLENDALE Northbound				FRUITVALE Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 17:00																	
Volume	148	626	320	1094	135	30	58	223	85	365	28	478	45	36	110	191	1986
Percent	13.5	57.2	29.3		60.5	13.5	26.0		17.8	76.4	5.9		23.6	18.8	57.6		
High Int. 17:45					17:45				17:45				17:00				17:45
Volume	56	179	121	327	46	10	23	75	28	100	14	123	16	16	42	67	556
Peak Factor				0.836				0.743				0.972				0.713	0.893



ITY OF SARATOGA

File Name : Saratoga_Fruitvale

Site Code : 00000000

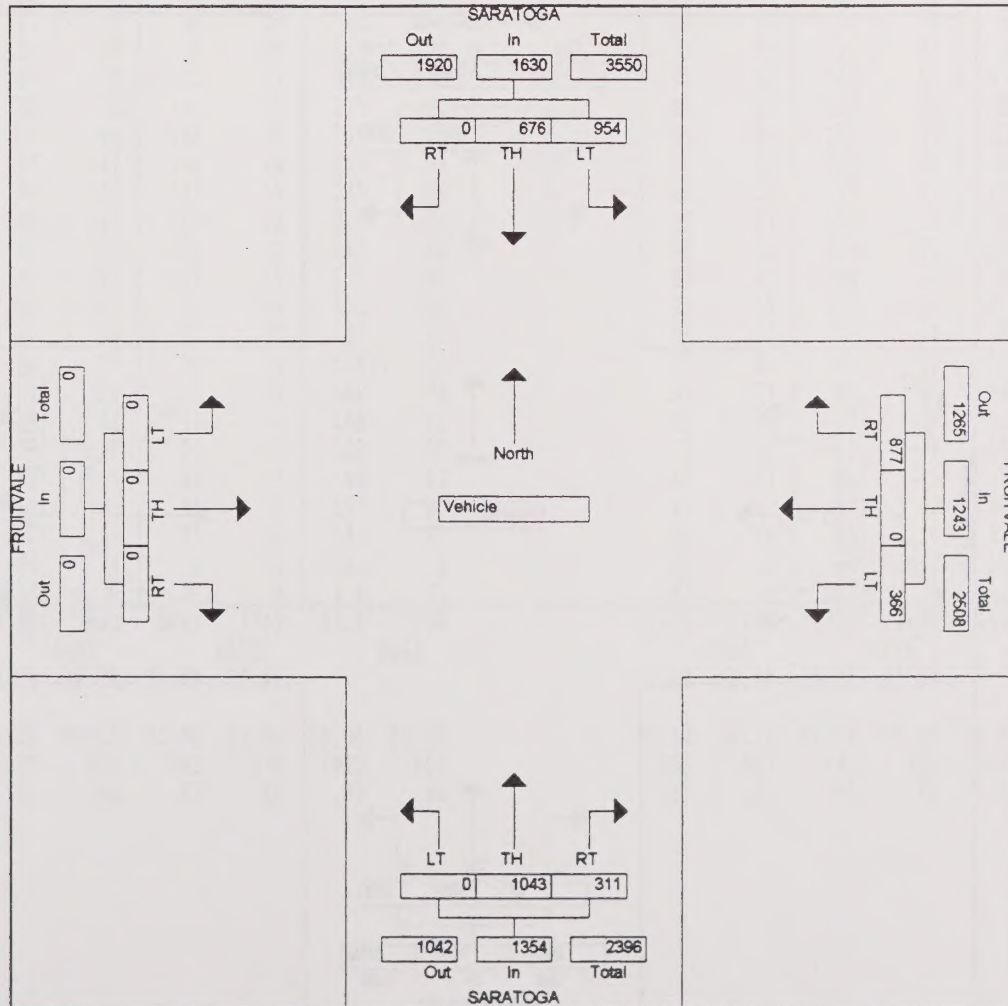
Start Date : 09/14/1999

Page : 1

Groups Printed: Vehicle

	SARATOGA Southbound				FRUITVALE Westbound				SARATOGA Northbound				FRUITVALE Eastbound					
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	PDS	App. Total	Int. Total
07:00	0	54	135	189	148	0	19	167	17	149	0	166	0	0	0	0	0	522
07:15	0	62	172	234	184	0	40	224	43	158	0	201	0	0	0	0	0	659
07:30	0	109	100	209	141	0	86	227	62	185	0	247	0	0	0	0	0	683
07:45	0	179	222	401	244	0	140	384	136	256	0	392	0	0	0	0	0	1177
Total	0	404	629	1033	717	0	285	1002	258	748	0	1006	0	0	0	0	0	3041
08:00	0	143	192	335	290	0	112	402	79	289	0	368	0	0	0	0	0	1105
08:15	0	247	221	468	209	0	84	293	49	242	0	291	0	0	0	0	0	1052
08:30	0	107	319	426	134	0	30	164	47	256	0	303	0	0	0	0	0	893
08:45	0	138	384	522	166	0	39	205	48	180	0	228	0	0	0	0	0	955
Total	0	635	1116	1751	799	0	265	1064	223	967	0	1190	0	0	0	0	0	4005
Grand Total	0	1039	1745	2784	1516	0	550	2066	481	1715	0	2196	0	0	0	0	0	7046
Apprch %	0.0	37.3	62.7		73.4	0.0	26.6		21.9	78.1	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	14.7	24.8	39.5	21.5	0.0	7.8	29.3	6.8	24.3	0.0	31.2	0.0	0.0	0.0	0.0	0.0	

	SARATOGA Southbound				FRUITVALE Westbound				SARATOGA Northbound				FRUITVALE Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From 07:00 to 08:45 - Peak 1 of 1																	
Intersection 07:45																	
Volume	0	676	954	1630	877	0	366	1243	311	1043	0	1354	0	0	0	0	4227
Percent	0.0	41.5	58.5		70.6	0.0	29.4		23.0	77.0	0.0		0.0	0.0	0.0		
High Int. 08:15					08:00				07:45				6:45:00 AM				07:45
Volume	0	247	319	468	290	0	140	402	136	289	0	392	0	0	0	0	1177
Peak Factor				0.871				0.773				0.864					0.898



Marks Traffic Data Service

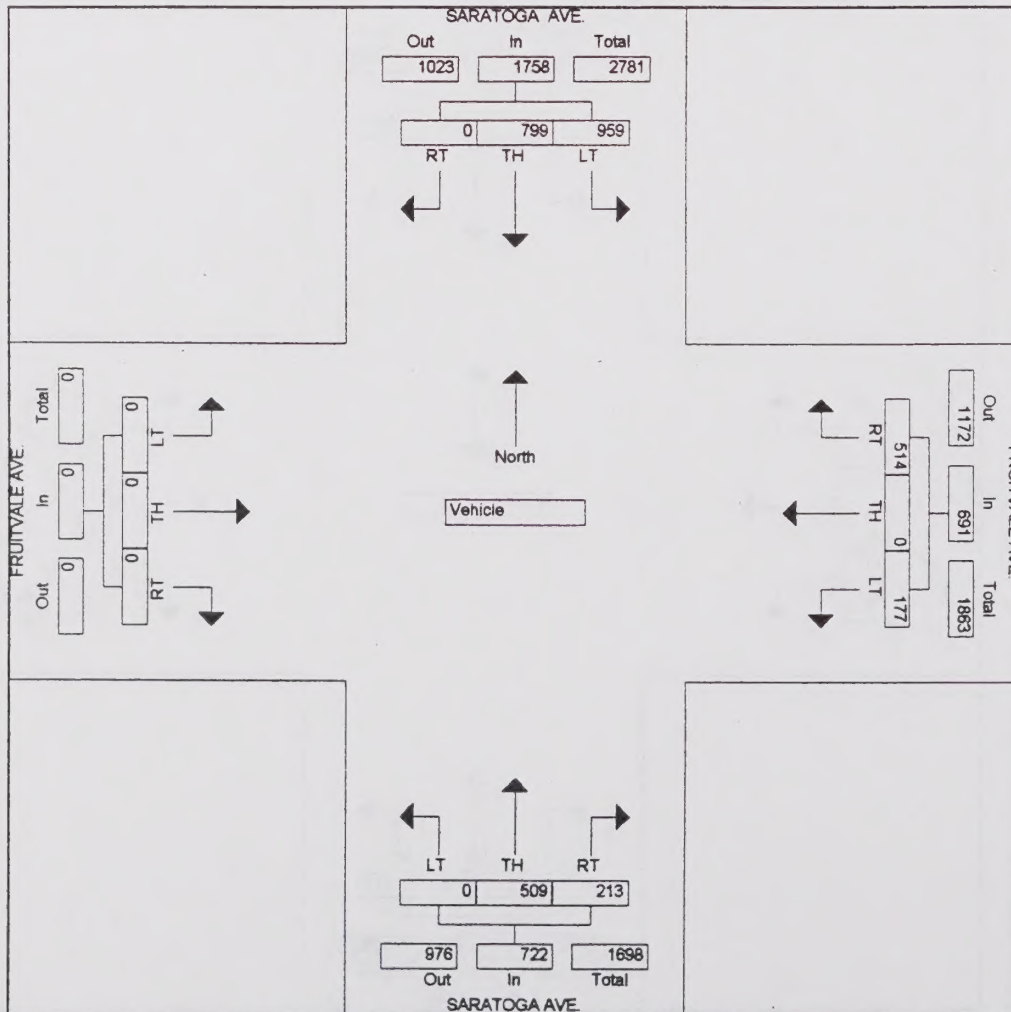
City of Saratoga

File Name : Saratoga_Fruitvale
Site Code : 00000000
Start Date : 09/14/1999
Page : 1

Groups Printed: Vehicle

	SARATOGA AVE. Southbound				FRUITVALE AVE. Westbound				SARATOGA AVE. Northbound				FRUITVALE AVE. Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	0	144	137	281	180	0	48	228	33	139	0	172	0	0	0	0	681
16:15	0	151	120	271	116	0	28	144	35	128	0	163	0	0	0	0	578
16:30	0	152	177	329	117	0	62	179	57	131	0	188	0	0	0	0	696
16:45	0	165	223	388	157	0	54	211	66	158	0	224	0	0	0	0	823
Total	0	612	657	1269	570	0	192	762	191	556	0	747	0	0	0	0	2778
17:00	0	174	209	383	158	0	53	211	57	143	0	200	0	0	0	0	794
17:15	0	188	238	426	132	0	43	175	47	138	0	185	0	0	0	0	786
17:30	0	210	226	436	111	0	47	158	46	108	0	154	0	0	0	0	748
17:45	0	227	286	513	113	0	34	147	63	120	0	183	0	0	0	0	843
Total	0	799	959	1758	514	0	177	691	213	509	0	722	0	0	0	0	3171
Grand Total	0	1411	1616	3027	1084	0	369	1453	404	1065	0	1469	0	0	0	0	5949
Apprch %	0.0	46.6	53.4		74.6	0.0	25.4		27.5	72.5	0.0		0.0	0.0	0.0		
Total %	0.0	23.7	27.2	50.9	18.2	0.0	6.2	24.4	6.8	17.9	0.0	24.7	0.0	0.0	0.0	0.0	

	SARATOGA AVE. Southbound				FRUITVALE AVE. Westbound				SARATOGA AVE. Northbound				FRUITVALE AVE. Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Volume	0	799	959	1758	514	0	177	691	213	509	0	722	0	0	0	0	3171
Percent	0.0	45.4	54.6		74.4	0.0	25.6		29.5	70.5	0.0		0.0	0.0	0.0		
High Int. 17:45					17:00				17:00				3:45:00 PM				17:45
Volume	0	227	286	513	158	0	53	211	63	143	0	200	0	0	0	0	843
Peak Factor				0.857				0.819				0.902					0.940



Street name : FRUITVALE AVE. N/O FARWELL AVE.

Direction 1

Begin	Tues.		SB		NB		Combined		Wed.	SB		NB		Combined	
Time	09/14		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	09/15	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00			4	79	2	42	6	121		4	58	1	71	5	129
12:15			4	72	0	35	4	107		1	93	2	63	3	156
12:30			0	41	0	39	0	80		3	85	0	64	3	149
12:45			2	56	1	53	3	109		1	65	0	42	1	107
01:00			1	75	1	48	2	123		0	61	2	45	2	106
01:15			3	67	0	54	3	121		1	74	1	52	2	126
01:30			1	79	1	46	2	125		0	65	0	42	0	107
01:45			0	77	2	41	2	118		1	63	0	50	1	113
02:00			1	54	0	34	1	88		2	67	1	53	3	120
02:15			0	57	0	49	0	106		0	104	0	80	0	184
02:30			1	62	0	52	1	114		0	127	0	58	0	185
02:45			0	67	0	62	0	129		0	79	0	67	0	146
03:00			2	102	0	70	2	172		1	89	1	54	2	143
03:15			0	158	2	76	2	234		0	126	0	47	0	173
03:30			0	161	1	60	1	221		0	128	0	58	0	186
03:45			0	115	1	64	1	179		0	116	2	59	2	175
04:00			0	117	2	30	2	147		0	104	0	59	0	163
04:15			0	101	1	35	1	136		2	129	1	56	3	185
04:30			1	123	0	57	1	180		0	140	2	64	2	204
04:45			0	107	1	70	1	177		0	109	2	67	2	176
05:00			1	135	5	64	6	199		1	125	1	70	2	195
05:15			1	107	7	48	8	155		1	121	5	76	6	197
05:30			5	102	9	46	14	148		1	103	5	71	6	174
05:45			5	109	11	75	16	184		6	131	12	77	18	208
06:00			5	114	10	59	15	173		2	95	14	79	16	174
06:15			3	113	19	70	22	183		2	107	21	91	23	198
06:30			12	96	31	60	43	156		6	123	31	73	37	196
06:45			12	79	50	58	62	137		10	88	51	78	61	166
07:00			20	90	95	38	119	128		19	99	75	53	94	152
07:15			39	78	151	32	190	110		29	82	143	50	172	132
07:30			32	72	145	19	177	91		65	62	139	23	204	85
07:45			71	40	186	25	257	65		56	56	172	14	228	70
08:00			87	47	189	26	276	73		99	52	214	24	313	76
08:15			66	31	173	19	239	50		49	50	222	13	271	63
08:30			49	42	166	22	215	64		60	44	136	18	196	62
08:45			49	56	233	10	282	66		48	61	128	20	176	81
09:00			47	70	126	16	173	86		44	47	164	25	208	72
09:15			44	38	82	14	126	52		52	55	175	22	227	77
09:30			28	50	67	17	95	67		35	70	79	14	114	84
09:45			48	27	70	10	118	37		43	42	81	13	124	55
10:00			41	20	67	9	108	29		54	27	88	16	142	43
10:15			50	22	98	4	148	26		55	21	76	6	131	27
10:30			73	20	50	2	123	22		75	21	55	9	130	30
10:45			54	5	42	7	96	12		49	12	61	5	110	17
11:00			56	11	61	9	117	20		41	11	61	6	102	17
11:15			67	6	71	5	138	11		70	10	54	4	124	14
11:30			64	4	62	4	126	8		69	2	54	3	123	5
11:45			88	7	86	4	174	11		63	4	58	2	121	6
Totals			1137	3361	2381	1789	3518	5150		1120	3603	2390	2106	3510	5709
Day Totals			4498		4170		8668			4723		4496		9219	
% Total			13.1%	38.7%	27.4%	20.6%				12.1%	39.0%	25.9%	22.8%		
Peaks			11:00	03:15	08:00	03:00	08:00	03:00		07:30	04:15	07:30	06:00	07:30	05:45
Volume			275	551	761	270	1012	806		269	503	747	321	1016	776
P.H.F.			.78	.85	.81	.88	.89	.86		.67	.89	.84	.88	.81	.93

Street name : QUITO RD. S/O VESSING RD.

Direction 1

Begin Time	Wed. 09/22	NB A.M.	P.M.	SB A.M.	P.M.	Combined A.M.	P.M.	Thur. 09/23	NB A.M.	P.M.	SB A.M.	P.M.	Combined A.M.	P.M.
12:00		2	43	0	49	2	92		4	51	2	47	6	98
12:15		1	47	3	56	4	103		1	42	4	54	5	96
12:30		3	31	1	60	4	91		2	42	2	65	4	107
12:45		1	37	2	59	3	96		2	33	7	53	9	86
01:00		1	39	0	50	1	89		1	47	1	41	2	88
01:15		1	51	1	51	2	102		0	45	0	51	0	96
01:30		3	41	2	53	5	94		0	39	0	54	0	93
01:45		1	33	0	61	1	94		2	48	2	45	4	93
02:00		0	46	0	50	0	96		1	39	1	47	2	86
02:15		2	47	0	64	2	111		1	38	0	53	1	91
02:30		2	44	0	66	2	110		0	40	0	65	0	105
02:45		2	46	1	60	3	106		2	43	1	68	3	111
03:00		1	51	1	57	2	108		0	48	0	75	0	123
03:15		0	45	0	62	0	107		1	42	0	68	1	110
03:30		0	57	0	84	0	141		0	47	1	84	1	131
03:45		1	39	0	83	1	122		1	38	0	70	1	108
04:00		0	39	0	88	0	127		0	36	0	83	0	119
04:15		0	47	0	80	0	127		2	38	0	92	2	130
04:30		1	54	0	101	1	155		0	42	0	101	0	143
04:45		1	36	2	98	3	134		3	43	0	124	3	167
05:00		6	36	0	93	6	129		4	45	2	136	6	181
05:15		5	48	2	114	7	162		5	58	3	128	8	186
05:30		5	47	4	111	9	158		3	53	2	130	5	183
05:45		6	36	5	129	11	165		10	46	5	133	15	179
06:00		9	42	7	111	16	153		9	50	3	126	12	176
06:15		15	48	10	115	25	163		22	36	11	130	33	166
06:30		41	41	14	107	55	148		26	36	12	111	38	147
06:45		40	39	13	94	53	133		42	48	19	90	61	138
07:00		67	37	21	78	88	115		70	33	26	78	96	111
07:15		92	27	38	46	130	73		84	41	37	77	121	118
07:30		95	34	52	63	147	97		98	28	41	43	139	71
07:45		112	25	57	36	169	61		101	32	61	42	162	74
08:00		90	15	52	36	142	51		96	22	57	39	153	61
08:15		90	19	66	37	156	56		73	25	67	33	140	58
08:30		75	25	77	26	152	51		84	18	49	44	133	62
08:45		88	16	73	23	161	39		78	22	56	29	134	51
09:00		75	23	44	28	119	51		67	21	54	21	121	42
09:15		59	15	49	21	108	36		70	20	59	28	129	48
09:30		58	14	51	25	109	39		43	22	45	37	88	59
09:45		60	16	38	26	98	42		26	14	36	24	62	38
10:00		39	12	55	17	94	29		37	11	40	17	77	28
10:15		35	11	39	11	74	22		39	15	40	15	79	30
10:30		39	13	39	13	78	26		38	13	45	11	83	24
10:45		42	3	39	8	81	11		22	4	47	9	69	13
11:00		42	5	49	9	91	14		41	6	46	6	87	12
11:15		33	4	39	8	72	12		46	7	46	5	92	12
11:30		37	2	55	2	92	4		39	3	49	5	88	8
11:45		43	5	60	4	103	9		48	1	42	4	90	5
Totals		1421	1531	1061	2723	2482	4254		1344	1571	1021	2891	2365	4462
Day Totals			2952		3784		6736			2915		3912		6827
% Total		21.1%	22.7%	15.7%	40.4%				19.6%	23.0%	14.9%	42.3%		
Peaks		07:15	02:45	08:00	05:30	07:45	05:30		07:15	05:15	07:45	05:00	07:30	05:00
Volume		389	199	268	466	619	639		379	207	234	527	594	729
P.H.F.		.86	.87	.87	.90	.91	.96		.93	.89	.87	.96	.91	.97

Street name : SARATOGA AVE. W/O HERRIMAN AVE.

Direction 1

Begin Time	Tues. 09/14	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.
12:00		6	106	17	126	23	232		7	104	14	124	21	228
12:15		3	93	4	104	7	197		13	108	7	117	20	225
12:30		0	89	11	105	11	194		5	135	7	113	12	248
12:45		4	104	4	101	8	205		3	86	3	107	6	193
01:00		6	99	5	102	11	201		6	84	5	107	11	191
01:15		4	107	2	93	6	200		2	95	0	97	2	192
01:30		5	106	5	98	10	204		6	89	4	110	10	199
01:45		3	99	11	108	14	207		6	95	5	92	11	187
02:00		1	108	0	84	1	192		1	105	0	100	1	205
02:15		1	108	3	101	4	209		1	148	3	108	4	256
02:30		3	126	0	92	3	218		3	115	2	141	5	256
02:45		0	126	1	121	1	247		5	124	1	101	6	225
03:00		2	132	1	113	3	245		0	139	4	138	4	277
03:15		5	146	2	135	7	281		3	117	1	145	4	262
03:30		2	114	5	142	7	256		1	97	1	129	2	226
03:45		1	114	2	112	3	226		2	111	2	130	4	241
04:00		2	94	2	139	4	233		2	113	3	130	5	243
04:15		5	89	4	119	9	208		1	110	4	121	5	231
04:30		5	117	6	150	11	267		5	112	0	113	5	225
04:45		2	94	1	125	3	219		8	96	4	132	12	228
05:00		8	120	3	128	11	248		9	113	4	125	13	238
05:15		9	94	5	170	14	264		16	80	7	136	23	216
05:30		26	84	15	132	41	216		20	83	12	154	32	237
05:45		23	76	19	180	42	256		24	102	10	164	34	266
06:00		43	90	16	142	59	232		50	85	15	153	65	238
06:15		62	104	33	149	95	253		46	85	39	133	85	218
06:30		61	80	21	129	82	209		72	96	29	146	101	242
06:45		77	90	38	108	115	198		64	108	53	139	117	247
07:00		115	87	47	114	162	201		103	83	35	125	138	208
07:15		138	70	41	100	179	170		158	69	45	120	203	189
07:30		187	62	41	103	228	165		156	68	56	127	212	195
07:45		221	42	80	83	301	125		193	78	51	92	244	170
08:00		161	60	86	90	247	150		207	76	80	96	287	172
08:15		129	47	109	77	238	124		144	65	76	70	220	135
08:30		131	41	97	73	228	114		127	45	143	78	270	123
08:45		130	54	118	73	248	127		118	62	110	80	228	142
09:00		100	53	108	57	208	110		143	68	138	71	281	139
09:15		92	56	111	76	203	132		117	56	90	57	207	113
09:30		108	59	69	58	177	117		112	50	81	56	193	106
09:45		116	47	84	36	200	83		112	57	92	57	204	114
10:00		91	53	96	47	187	100		93	43	90	47	183	90
10:15		105	36	113	51	218	87		106	34	88	56	194	90
10:30		103	29	71	33	174	62		99	27	92	23	191	50
10:45		96	21	107	19	203	40		80	33	94	26	174	59
11:00		107	24	104	14	211	38		126	29	83	24	209	53
11:15		91	13	98	18	189	31		159	22	111	16	270	38
11:30		129	10	109	9	238	19		142	22	113	12	255	34
11:45		116	16	115	14	231	30		114	15	143	6	257	21
Totals		2835	3789	2040	4553	4875	8342		2990	3937	2050	4744	5040	8681
Day Totals			6624		6593		13217			6927		6794		13721
% Total		21.4%	28.6%	15.4%	34.4%				21.7%	28.6%	14.9%	34.5%		
Peaks		07:15	02:30	08:30	05:15	07:30	02:45		07:15	02:15	08:30	05:15	07:45	02:30
Volume		707	530	434	624	1014	1029		714	526	481	607	1021	1020
P.H.F.		.79	.90	.91	.86	.84	.91		.86	.88	.84	.92	.88	.92

Street name : FRUITVALE AVE. S/O SARATOGA AVE.

Direction 1

Begin Time	Tues. 09/14	SB A.M.	P.M.	NB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	SB A.M.	P.M.	NB A.M.	P.M.	Combined A.M.	P.M.
12:00		6	146	6	340	12	486		10	190	10	244	20	434
12:15		9	124	4	241	13	365		6	185	6	335	12	520
12:30		1	116	2	213	3	329		3	140	2	367	5	507
12:45		1	129	3	200	4	329		0	138	1	214	1	352
01:00		1	152	2	257	3	409		0	138	3	222	3	360
01:15		3	153	0	371	3	524		2	141	4	302	6	443
01:30		1	130	1	353	2	483		1	139	0	325	1	464
01:45		1	112	3	214	4	326		2	119	3	246	5	365
02:00		2	109	4	169	6	278		0	166	0	244	0	410
02:15		0	119	1	185	1	304		0	230	2	336	2	566
02:30		2	118	0	252	2	370		4	162	4	291	8	453
02:45		6	155	1	303	7	458		7	148	3	270	10	418
03:00		2	247	3	279	5	526		2	146	2	219	4	365
03:15		1	240	1	385	2	625		0	193	0	283	0	476
03:30		1	180	3	251	4	431		1	167	1	234	2	401
03:45		0	181	0	214	0	395		0	176	2	219	2	395
04:00		2	161	1	244	3	405		1	137	0	182	1	319
04:15		3	140	5	207	8	347		3	149	2	201	5	350
04:30		3	176	2	203	5	379		4	170	6	204	10	374
04:45		3	186	4	222	7	408		5	190	7	196	12	386
05:00		4	193	2	218	6	411		2	218	7	217	9	435
05:15		9	178	16	221	25	399		7	173	11	221	18	394
05:30		19	192	14	170	33	362		15	209	13	193	28	402
05:45		43	218	30	206	73	424		32	260	24	212	56	472
06:00		39	218	28	188	67	406		20	223	27	224	47	447
06:15		20	300	30	236	50	536		27	274	37	243	64	517
06:30		24	228	67	262	91	490		30	248	61	214	91	462
06:45		63	219	87	197	150	416		58	199	88	216	146	415
07:00		99	141	152	167	251	308		100	153	124	222	224	375
07:15		221	114	218	140	439	254		234	120	204	153	438	273
07:30		138	82	215	122	353	204		128	89	241	144	369	233
07:45		241	63	306	139	547	202		245	79	272	106	517	185
08:00		264	79	364	136	628	215		317	60	342	109	659	169
08:15		239	76	305	95	544	171		266	74	303	132	569	206
08:30		280	55	174	195	454	250		267	65	193	142	460	207
08:45		344	69	212	172	556	241		189	108	183	217	372	325
09:00		272	67	217	224	489	291		259	86	186	214	445	300
09:15		159	57	184	217	343	274		357	82	237	231	594	313
09:30		110	41	145	206	255	247		169	76	217	216	386	292
09:45		136	44	151	99	287	143		161	49	168	142	329	191
10:00		247	34	166	63	413	97		240	29	191	80	431	109
10:15		323	22	332	39	655	61		270	31	279	38	549	69
10:30		152	26	270	33	422	59		155	33	284	33	439	66
10:45		111	18	165	29	276	47		125	24	179	28	304	52
11:00		134	12	191	33	325	45		165	12	170	17	335	29
11:15		169	12	228	30	397	42		226	10	282	12	508	22
11:30		182	6	206	12	388	18		148	6	312	8	460	14
11:45		216	8	362	5	578	13		142	6	246	4	388	10
Totals		4306	5846	4883	8957	9189	14803		4405	6220	4939	9122	9344	15342
Day Totals		10152		13840		23992			10625		14061		24686	
% Total		17.9%	24.3%	20.3%	37.3%				17.8%	25.2%	20.0%	36.9%		
Peaks		08:15	06:00	07:30	02:30	08:00	02:45		07:45	05:45	07:30	12:00	07:45	05:45
Volume		1135	965	1190	1219	2182	2040		1095	1005	1158	1160	2205	1898
P.H.F.		.82	.80	.81	.79	.86	.81		.86	.91	.84	.79	.83	.91

Street name : COX AVE. AT S.R. 85 UNDERCROSSING

Direction 1

Begin Time	Tues. 09/14		WB		Combined		Wed. 09/15		WB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
0:00	6	89	8	68	14	157	4	62	3	90	7	152
12:15	0	70	6	69	6	139	4	78	5	71	9	149
12:30	2	66	2	61	4	127	1	71	4	82	5	153
12:45	4	50	6	72	10	122	2	89	4	84	6	173
01:00	0	86	3	69	3	155	2	71	2	74	4	145
01:15	2	59	0	81	2	140	0	64	1	69	1	133
01:30	1	79	3	82	4	161	0	57	2	71	2	128
01:45	1	82	3	61	4	143	1	81	2	110	3	191
02:00	1	78	0	78	1	156	1	52	2	102	3	154
02:15	0	82	2	67	2	149	1	121	0	90	1	211
02:30	1	78	0	107	1	185	1	88	3	88	4	176
02:45	0	69	0	99	0	168	0	101	2	81	2	182
03:00	1	110	1	103	2	213	1	98	0	87	1	185
03:15	0	103	3	103	3	206	0	112	0	91	0	203
03:30	2	113	3	84	5	197	1	101	0	85	1	186
03:45	2	96	0	90	2	186	0	87	4	84	4	171
04:00	0	106	1	83	1	189	0	84	3	90	3	174
04:15	2	82	1	90	3	172	0	92	1	97	1	189
04:30	2	107	0	98	2	205	1	115	1	110	2	225
04:45	3	115	2	103	5	218	6	101	2	129	8	230
05:00	3	112	2	119	5	231	6	116	3	106	9	222
05:15	7	94	5	119	12	213	9	115	8	105	17	220
05:30	14	111	4	108	18	219	19	100	2	107	21	207
05:45	15	109	11	112	26	221	8	114	11	130	19	244
06:00	18	100	10	106	28	206	19	131	10	126	29	257
06:15	26	81	11	118	37	199	14	93	17	111	31	204
06:30	33	92	15	102	48	194	27	104	14	101	41	205
06:45	41	83	34	109	75	192	41	117	32	104	73	221
07:00	69	64	50	88	119	152	50	68	41	90	91	158
07:15	84	55	61	75	145	130	78	47	66	72	144	119
07:30	97	55	113	58	210	113	79	63	78	58	157	121
07:45	138	46	143	67	281	113	118	55	156	77	274	132
08:00	138	40	114	55	252	95	140	30	124	59	264	89
08:15	182	35	130	41	312	76	160	45	137	52	297	97
08:30	137	23	88	54	225	77	123	38	99	38	222	76
08:45	107	31	89	56	196	87	125	40	88	68	213	108
09:00	82	29	67	40	149	69	107	35	77	52	184	87
09:15	86	27	63	42	149	69	72	41	65	78	137	119
09:30	83	21	39	18	122	39	71	25	66	69	137	94
09:45	64	17	58	29	122	46	82	24	56	37	138	61
10:00	65	16	49	21	114	37	72	16	57	32	129	48
10:15	62	7	48	32	110	39	72	16	68	13	140	29
10:30	69	10	52	21	121	31	81	16	57	15	138	31
10:45	69	11	57	14	126	25	61	6	48	10	109	16
11:00	60	6	62	10	122	16	81	10	56	11	137	21
11:15	81	8	61	16	142	24	73	6	69	10	142	16
11:30	75	5	73	10	148	15	77	4	82	9	159	13
11:45	62	7	83	8	145	15	64	2	95	5	159	7
Totals	1997	3015	1636	3316	3633	6331	1955	3202	1723	3530	3678	6732
Day Totals	5012		4952		9964		5157		5253		10410	
% Total	20.0%	30.2%	16.4%	33.2%			18.7%	30.7%	16.5%	33.9%		
Peaks	07:45	04:45	07:30	05:00	07:45	05:00	08:00	05:15	07:45	05:30	07:45	05:15
Volume	595	432	500	458	1070	884	548	460	516	474	1057	928
P.H.F.	.81	.93	.87	.96	.85	.95	.85	.87	.82	.91	.88	.90

Street name : SARATOGA AVE. W/O MCFARLAND AVE.

Direction 1

Page : 1

Begin Time	Tues. 09/14	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.
12:00		24	358	46	349	70	707		33	344	52	351	85	695
12:15		23	315	31	326	54	641		32	326	37	387	69	713
12:30		14	289	28	329	42	618		17	372	22	347	39	719
12:45		15	294	19	344	34	638		22	338	21	327	43	665
01:00		13	307	15	360	28	667		16	296	18	363	34	659
01:15		9	312	10	328	19	640		14	312	10	316	24	628
01:30		15	358	14	326	29	684		16	299	15	302	31	601
01:45		15	311	22	312	37	623		6	299	14	350	20	649
02:00		13	260	11	305	24	565		13	309	10	348	23	657
02:15		10	303	5	343	15	646		5	344	4	318	9	662
02:30		4	330	5	349	9	679		6	368	7	360	13	728
02:45		3	319	8	391	11	710		8	351	9	364	17	715
03:00		9	355	6	410	15	765		6	354	13	407	19	761
03:15		4	435	3	387	7	822		4	405	9	394	13	799
03:30		9	434	12	399	21	833		10	403	4	414	14	817
03:45		6	331	6	399	12	730		9	375	6	388	15	763
04:00		6	357	12	362	18	719		13	334	12	386	25	720
04:15		16	358	18	421	34	779		9	384	13	425	22	809
04:30		10	352	14	441	24	793		11	368	17	396	28	764
04:45		18	399	17	433	35	832		23	367	29	430	52	797
05:00		21	389	32	460	53	849		22	420	31	474	53	894
05:15		36	436	49	498	85	934		29	409	46	480	75	889
05:30		41	373	88	460	129	833		48	426	61	505	109	931
05:45		68	392	114	458	182	850		76	391	104	506	180	897
06:00		82	352	102	506	184	858		64	373	100	486	164	859
06:15		109	371	142	475	251	846		104	388	134	489	238	877
06:30		143	421	195	428	338	849		127	389	200	472	327	861
06:45		183	379	219	440	402	819		165	414	250	420	415	834
07:00		222	319	289	395	511	714		195	409	264	372	459	781
07:15		286	337	338	359	624	696		274	337	322	396	596	733
07:30		364	294	336	291	700	585		322	323	333	288	655	611
07:45		388	239	369	295	757	534		426	261	418	289	844	550
08:00		430	266	390	319	820	585		430	269	427	309	857	578
08:15		353	216	408	251	761	467		388	254	431	263	819	517
08:30		333	223	421	270	754	493		369	206	423	236	792	442
08:45		330	207	363	264	693	471		302	251	383	265	685	516
09:00		311	209	366	247	677	456		274	214	413	229	687	443
09:15		302	211	366	224	668	435		285	212	345	248	630	460
09:30		238	201	306	194	544	395		341	197	310	243	651	440
09:45		297	165	278	160	575	325		298	157	344	199	642	356
10:00		265	122	293	131	558	253		230	140	301	154	531	294
10:15		279	129	318	146	597	275		288	115	313	127	601	242
10:30		296	114	271	102	567	216		300	87	302	112	602	199
10:45		263	75	297	67	560	142		273	78	284	85	557	163
11:00		273	69	275	70	548	139		288	66	292	68	580	134
11:15		285	60	349	65	634	125		365	61	354	66	719	127
11:30		331	48	345	51	676	99		383	45	289	45	672	90
11:45		345	39	339	43	684	82		330	47	378	50	708	97
Totals		7110	13433	7960	14983	15070	28416		7269	13887	8174	15249	15443	29136
Day Totals			20543		22943		43486			21156		23423		44579
% Total		16.3%	30.8%	18.3%	34.4%				16.3%	31.1%	18.3%	34.2%		
Peaks	07:30	04:45	07:45	05:15	07:45	05:15		07:45	05:00	07:45	05:30	07:45	05:00	
Volume	1535	1597	1588	1922	3092	3475		1613	1646	1699	1986	3312	3611	
P.H.F.	.89	.91	.94	.94	.94	.93		.93	.96	.98	.98	.96	.96	

Street name : SARATOGA-SUNNYVALE RD. S/O THELMA RD.

Direction 1

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Begin Time	Tues. 09/14		SB		NB		Combined		Wed. 09/15		SB		NB		Combined			
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
0:00		11	181		14	163		25	344		6	147		6	155	12	302	
12:15		15	143		3	141		18	284		12	175		8	160	20	335	
12:30		8	108		9	108		17	216		4	152		8	148	12	300	
12:45		5	129		5	99		10	228		6	125		4	135	10	260	
01:00		11	128		6	115		17	243		3	113		2	117	5	230	
01:15		2	141		4	125		6	266		6	129		3	139	9	268	
01:30		1	129		3	121		4	250		7	135		3	128	10	263	
01:45		10	127		8	128		18	255		3	142		2	124	5	266	
02:00		0	158		1	149		1	307		3	165		1	144	4	309	
02:15		3	156		1	150		4	306		2	155		0	183	2	338	
02:30		3	161		1	168		4	329		1	147		3	138	4	285	
02:45		3	186		2	160		5	346		2	160		1	140	3	300	
03:00		1	183		1	181		2	364		0	181		0	171	0	352	
03:15		2	185		4	201		6	386		2	173		3	181	5	354	
03:30		2	147		4	162		6	309		1	166		1	153	2	319	
03:45		4	149		3	150		7	299		3	173		3	147	6	320	
04:00		1	199		1	170		2	369		1	162		0	137	1	299	
04:15		3	183		2	144		5	327		1	208		0	158	1	366	
04:30		2	188		1	132		3	320		8	193		6	166	14	359	
04:45		5	166		11	137		16	303		9	212		4	151	13	363	
05:00		7	198		9	164		16	362		4	239		8	173	12	412	
05:15		6	229		11	159		17	388		13	218		16	178	29	396	
05:30		10	228		20	184		30	412		9	223		11	205	20	428	
05:45		13	227		21	165		34	392		23	247		34	164	57	411	
06:00		29	216		37	141		66	357		23	242		35	162	58	404	
06:15		36	192		51	125		87	317		37	230		49	148	86	378	
06:30		46	173		82	129		128	302		67	229		83	142	150	371	
06:45		96	179		114	118		210	297		92	202		104	132	196	334	
07:00		139	137		159	102		298	239		113	188		132	124	245	312	
07:15		162	122		191	99		353	221		148	152		178	108	326	260	
07:30		179	121		213	95		392	216		191	136		204	78	395	214	
07:45		236	90		280	60		516	150		211	109		215	73	426	182	
08:00		200	89		301	68		501	157		233	95		247	74	480	169	
08:15		223	79		254	67		477	146		275	94		303	73	578	167	
08:30		210	89		247	54		457	143		238	87		272	74	510	161	
08:45		187	73		224	57		411	130		211	71		227	76	438	147	
09:00		158	70		171	59		329	129		182	97		184	100	366	197	
09:15		145	78		139	54		284	132		140	96		152	111	292	207	
09:30		123	75		133	56		256	131		132	90		149	69	281	159	
09:45		103	58		129	60		232	118		149	60		146	54	295	114	
10:00		121	54		117	42		238	96		114	46		124	37	238	83	
10:15		121	38		113	36		234	74		118	48		118	38	236	86	
10:30		80	38		96	26		176	64		111	41		114	35	225	76	
10:45		113	32		116	24		229	56		116	41		102	29	218	70	
11:00		91	19		119	22		210	41		143	28		135	26	278	54	
11:15		117	18		125	19		242	37		148	26		153	10	301	36	
11:30		152	16		170	22		322	38		138	21		140	12	278	33	
11:45		143	12		165	14		308	26		152	13		160	12	312	25	
Totals		3338	6097		3891	5125		7229	11222		3611	6582		3853	5492		7464	12074
Day Totals			9435			9016			18451			10193			9345			19538
% Total		18.0%	33.0%		21.0%	27.7%					18.4%	33.6%		19.7%	28.1%			
Peaks		07:45	05:15		07:45	02:30		07:45	05:00		07:45	05:45		08:00	05:00		08:00	05:00
Volume		869	900		1082	710		1951	1554		957	948		1049	720		2006	1647
P.H.F.		.92	.98		.89	.88		.94	.94		.87	.95		.86	.87		.86	.96

Street name : PIERCE RD. E/O SURREY LN.

Direction 1

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Begin Time	Tues. 09/14	WB A.M.	P.M.	EB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	WB A.M.	P.M.	EB A.M.	P.M.	Combined A.M.	P.M.
12:00		5	41	6	28	11	69		8	34	2	26	10	60
12:15		7	26	4	33	11	59		5	36	3	38	8	74
12:30		4	27	1	30	5	57		2	28	1	33	3	61
12:45		2	36	3	40	5	76		4	21	2	29	6	50
01:00		6	31	2	31	8	62		2	25	0	20	2	45
01:15		3	24	1	33	4	57		1	26	1	24	2	50
01:30		1	22	2	27	3	49		1	21	2	30	3	51
01:45		2	29	3	32	5	61		0	24	0	21	0	45
02:00		0	25	1	32	1	57		4	31	1	17	5	48
02:15		1	22	0	23	1	45		0	23	0	26	0	49
02:30		2	19	0	20	2	39		2	17	0	20	2	37
02:45		1	35	1	26	2	61		0	21	0	31	0	52
03:00		2	29	0	35	2	64		0	37	0	34	0	71
03:15		0	31	1	35	1	66		0	29	0	28	0	57
03:30		0	37	1	39	1	76		0	29	0	41	0	70
03:45		1	31	1	55	2	86		0	50	0	36	0	86
04:00		0	33	0	35	0	68		0	39	0	33	0	72
04:15		1	37	0	33	1	70		0	32	1	24	1	56
04:30		0	37	0	36	0	73		0	36	0	29	0	65
04:45		0	36	0	31	0	67		0	29	0	26	0	55
05:00		2	40	0	28	2	68		0	40	0	18	0	58
05:15		1	44	4	22	5	66		2	39	2	32	4	71
05:30		1	44	2	23	3	67		0	40	3	23	3	63
05:45		0	49	6	29	6	78		1	37	5	21	6	58
06:00		2	54	5	39	7	93		1	54	4	24	5	78
06:15		2	32	9	25	11	57		2	56	7	23	9	79
06:30		3	48	8	27	11	75		3	46	11	30	14	76
06:45		6	55	12	33	18	88		12	47	13	29	25	76
07:00		18	42	22	18	40	60		12	49	22	28	34	77
07:15		8	48	24	18	32	66		16	42	20	18	36	60
07:30		14	35	33	21	47	56		21	55	25	28	46	83
07:45		15	26	44	18	59	44		20	37	44	21	64	58
08:00		19	33	55	22	74	55		13	37	48	12	61	49
08:15		21	25	62	16	83	41		23	19	56	16	79	35
08:30		27	21	41	11	68	32		33	18	44	14	77	32
08:45		25	17	33	13	58	30		24	17	42	21	66	38
09:00		26	20	38	10	64	30		33	30	40	17	73	47
09:15		29	17	23	5	52	22		29	15	32	9	61	24
09:30		28	33	25	13	53	46		27	17	35	11	62	28
09:45		21	17	28	11	49	28		36	14	39	11	75	25
10:00		37	9	27	11	64	20		16	11	32	5	48	16
10:15		49	15	30	4	79	19		19	15	27	6	46	21
10:30		28	10	31	3	59	13		21	16	24	6	45	22
10:45		24	14	27	3	51	17		23	12	21	45	44	57
11:00		28	10	37	5	65	15		25	10	32	26	57	36
11:15		21	6	31	1	52	7		13	7	27	7	40	14
11:30		31	3	32	2	63	5		22	7	27	7	49	14
11:45		24	5	36	3	60	8		20	3	39	4	59	7
Totals		548	1380	752	1088	1300	2468		496	1378	734	1078	1230	2456
Day Totals			1928		1840		3768			1874		1812		3686
% Total		14.5%	36.6%	19.9%	28.8%				13.4%	37.3%	19.9%	29.2%		
Peaks	10:00	06:30	07:45	03:00	07:45	06:00		09:00	06:00	07:45	03:00	08:15	06:00	
Volume	138	193	202	164	284	313		125	203	192	139	295	309	
P.H.F.	.70	.87	.81	.74	.85	.84		.86	.90	.85	.84	.93	.97	

Street name : PROSPECT RD. AT S.R. 85 UNDERCROSSING

Direction 1

Begin Time	Tues. 09/14	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	EB A.M.	P.M.	WB A.M.	P.M.	Combined A.M.	P.M.
12:00		12	129	16	172	28	301		16	137	14	180	30	317
12:15		12	125	11	163	23	288		11	132	8	179	19	311
12:30		7	135	6	160	13	295		7	154	14	194	21	348
12:45		9	134	3	173	12	307		11	147	13	169	24	316
01:00		6	141	6	192	12	333		7	148	6	181	13	329
01:15		6	123	8	197	14	320		2	113	0	161	2	274
01:30		6	150	5	222	11	372		3	127	9	170	12	297
01:45		5	200	4	210	9	410		5	135	7	175	12	310
02:00		9	150	7	196	16	346		5	121	2	197	7	318
02:15		4	151	4	224	8	375		1	178	4	201	5	379
02:30		2	146	2	216	4	362		3	145	3	201	6	346
02:45		1	163	1	210	2	373		5	200	3	239	8	439
03:00		1	148	3	201	4	349		2	171	3	235	5	406
03:15		1	185	1	226	2	411		1	185	0	259	1	444
03:30		1	154	3	199	4	353		3	154	4	246	7	400
03:45		1	156	1	219	2	375		2	163	2	244	4	407
04:00		2	179	3	203	5	382		2	184	4	210	6	394
04:15		4	143	3	192	7	335		7	177	4	212	11	389
04:30		2	188	6	218	8	406		6	158	8	194	14	352
04:45		6	179	7	247	13	426		6	172	7	241	13	413
05:00		5	192	6	234	11	426		1	240	5	264	6	504
05:15		7	203	13	246	20	449		6	247	12	300	18	547
05:30		8	189	15	270	23	459		8	243	23	297	31	540
05:45		14	219	29	260	43	479		17	201	34	274	51	475
06:00		18	200	34	267	52	467		16	199	33	285	49	484
06:15		21	201	54	249	75	450		20	194	47	271	67	465
06:30		50	175	61	235	111	410		47	203	56	242	103	445
06:45		50	197	97	231	147	428		52	166	86	233	138	399
07:00		77	180	113	203	190	383		58	178	100	249	158	427
07:15		177	139	165	182	342	321		127	194	172	204	299	398
07:30		146	119	223	166	359	285		153	118	182	168	335	286
07:45		147	122	256	144	403	266		156	139	255	164	411	303
08:00		218	99	224	144	442	243		205	111	228	150	433	261
08:15		234	79	257	127	491	206		196	103	261	116	457	219
08:30		143	84	266	115	409	199		156	85	264	103	420	188
08:45		140	76	258	104	398	180		186	98	258	110	444	208
09:00		124	61	206	113	330	174		140	72	231	120	371	192
09:15		103	68	147	93	250	161		111	65	178	116	289	181
09:30		118	58	176	76	294	134		101	67	155	105	256	172
09:45		112	69	148	83	260	152		94	58	151	78	245	136
10:00		117	31	161	67	278	98		117	49	136	72	253	121
10:15		103	41	174	61	277	102		103	40	175	53	278	93
10:30		102	26	127	45	229	71		101	28	151	43	252	71
10:45		112	25	162	30	274	55		113	39	179	36	292	75
11:00		105	19	165	34	270	53		100	39	150	35	250	74
11:15		140	21	163	28	303	49		125	17	184	26	309	43
11:30		125	15	154	24	279	39		147	18	187	22	334	40
11:45		152	16	204	15	356	31		140	21	192	19	332	40
Totals		2965	6003	4158	7886	7123	13889		2901	6333	4200	8243	7101	14576
Day Totals		8968		12044		21012			9234		12443		21677	
% Total		14.1%	28.5%	19.7%	37.5%				13.3%	29.2%	19.3%	38.0%		
Peaks		07:30	05:15	08:00	05:30	07:45	05:30		08:00	05:00	08:15	05:15	08:00	05:00
Volume		745	811	1005	1046	1745	1855		743	931	1014	1156	1754	2066
P.H.F.		.79	.92	.94	.96	.88	.96		.90	.94	.96	.96	.95	.94

Street name : SARATOGA-SUNNYVALE RD. N/O SEAGULL AVE.

Direction 1

Begin Time	Tues. 09/14	SB A.M.	P.M.	NB A.M.	P.M.	Combined A.M.	P.M.	Wed. 09/15	SB A.M.	P.M.	NB A.M.	P.M.	Combined A.M.	P.M.
12:00		15	173	14	234	29	407		17	208	12	229	29	437
12:15		11	115	11	257	22	372		10	179	14	249	24	428
12:30		12	131	7	197	19	328		18	180	12	249	30	429
12:45		11	143	8	221	19	364		11	143	6	249	17	392
01:00		7	167	6	221	13	388		10	172	7	231	17	403
01:15		5	135	9	239	14	374		7	159	9	244	16	403
01:30		6	159	5	261	11	420		6	181	7	200	13	381
01:45		2	110	12	272	14	382		5	184	1	222	6	406
02:00		5	169	0	235	5	404		7	196	5	217	12	413
02:15		2	132	3	254	5	386		1	203	5	253	6	456
02:30		4	194	7	255	11	449		3	185	2	254	5	439
02:45		1	156	1	252	2	408		4	187	0	277	4	464
03:00		1	177	3	271	4	448		3	207	3	249	6	456
03:15		7	165	7	265	14	430		2	214	3	257	5	471
03:30		6	186	5	233	11	419		0	205	5	240	5	445
03:45		3	189	3	285	6	474		2	185	3	191	5	376
04:00		0	205	3	270	3	475		1	265	4	291	5	556
04:15		5	215	4	262	9	477		4	268	3	226	7	494
04:30		4	191	6	257	10	448		1	292	10	218	11	510
04:45		1	224	12	286	13	510		4	286	9	249	13	535
05:00		5	283	22	274	27	557		2	324	25	271	27	595
05:15		5	278	31	269	36	547		4	315	26	239	30	554
05:30		10	304	35	228	45	532		7	342	45	247	52	589
05:45		21	233	58	290	79	523		16	360	70	248	86	608
06:00		14	269	90	219	104	488		5	310	109	252	114	562
06:15		11	215	133	261	144	476		10	315	130	179	140	494
06:30		48	196	173	222	221	418		44	267	188	220	232	487
06:45		70	192	205	246	275	438		64	260	210	191	274	451
07:00		45	196	331	165	376	361		43	209	349	197	392	406
07:15		67	129	328	224	395	353		110	151	347	165	457	316
07:30		127	139	419	158	546	297		107	185	412	124	519	309
07:45		102	111	522	132	624	243		146	185	449	112	595	297
08:00		112	106	406	136	518	242		71	117	458	133	529	250
08:15		117	105	479	109	596	214		135	125	465	92	600	217
08:30		131	110	382	106	513	216		134	98	437	118	571	216
08:45		156	118	288	107	444	225		130	136	346	94	476	230
09:00		103	77	289	121	392	198		113	92	316	113	429	205
09:15		128	88	241	86	369	174		84	123	316	98	400	221
09:30		75	60	294	95	369	155		106	71	237	120	343	191
09:45		93	71	226	102	319	173		152	76	208	70	360	146
10:00		119	56	229	65	348	121		91	64	254	51	345	115
10:15		79	47	205	50	284	97		138	66	191	50	329	116
10:30		136	59	207	41	343	100		85	54	230	43	315	97
10:45		119	21	192	41	311	62		139	25	217	46	356	71
11:00		116	3	225	59	341	62		139	38	222	24	361	62
11:15		142	27	221	30	363	57		119	39	282	28	401	67
11:30		114	12	324	29	438	41		116	32	279	24	395	56
11:45		161	10	272	13	433	23		156	24	270	20	426	44
Totals		2534	6851	6953	8905	9487	15756		2582	8502	7208	8364	9790	16866
Day Totals			9385		15858		25243			11084		15572		26656
% Total		10.0%	27.1%	27.5%	35.2%				9.6%	31.9%	27.0%	31.3%		
Peaks		11:00	05:00	07:30	04:30	07:30	05:00		11:00	05:00	07:45	02:30	07:45	05:00
Volume		533	1098	1826	1086	2284	2159		530	1341	1809	1037	2295	2346
P.H.F.		.82	.90	.87	.94	.91	.96		.84	.93	.97	.93	.95	.96

NEWSPAPER

TRAFFIC

NEW DAILY AND INTERSECTION TRAFFIC COUNTS

INTRODUCTION

On November 6, 1999 a community workshop was held to discuss strategies related to transportation in the City of Saratoga. The meeting was the second opportunity for community members to share their perspectives and participate in the process of updating the Saratoga General Plan Circulation Element. The purpose of the workshop was to identify ideas and suggestions for addressing the transportation topics that were derived from the first community meeting.

James Walgren of the City of Saratoga Planning Department opened the meeting by welcoming community members and introducing the project team. He then turned the meeting over to the workshop facilitator, Daniel Iacofano of Moore Iacofano Goltsman, Inc. Mr. Iacofano briefly described the purpose of the meeting and gave an overview of the agenda.

The meeting continued with a presentation on the Saratoga Circulation Element and a planning process update by Sohrab Rashid of Fehr and Peers Associates.

PUBLIC DISCUSSION PERIOD

Following the introductions and project overview, workshop participants formed a small discussion group. Mr. Iacofano introduced the discussion topics that were developed from the input received at the first community meeting. Workshop participants discussed strategies and ideas under the following topics:

- Traffic Calming
- Suggested Routes to School
- Pedestrian and Bicycle Path System
- Traffic Signals
- Transit Issues
- Special Events/Major Trip Generators

This report summarizes the workshop discussion and the ideas recorded on the comment sheets and on large-scale maps presented to the group.

Traffic Calming

- Travel speeds on Pierce Road are high especially near Saratoga-Sunnyvale Road
- A new signal on Saratoga-Sunnyvale road could increase volume and speed on Seagull Way
- Explore the need for an additional connection between Brockton Lane and Cox Avenue to reduce traffic on Miller Avenue
- Titus Avenue should be considered as a collector street
- Look at improvements on Quito Road between Bucknall Road and Allendale Avenue
- Look at Quito Road/Allendale Avenue intersection

Suggested Routes to School

- Provide home to school route maps to parents
- Work with all public and private schools

Pedestrian and Bicycle Path System

- Install sidewalks on main arterials
- Close path gaps near Saratoga Avenue/Fruitvale Avenue intersection
- Investigate potential for pedestrian path on Sobey Road
- Sign an alternative bicycle route to Saratoga-Sunnyvale Road is Arroyo de Arguello, Comer Drive, Pierce Road, Surrey Lane, and various local streets to get to 4th Street and the Village

- Explore development of a bicycle path on levees near the north end of Arroyo de Arguello
- Explore opportunity for bicycle connection to Los Gatos on Bicknell Road

Traffic Signals

- Improve coordination of traffic signals especially on Saratoga Avenue
- Check left-turn actuation of signal at Saratoga Avenue/Scotland Drive

Transit Issues

- Need direct transit service to San Jose to reduce the number of transfers and travel time
- Need bus service on Cox Avenue
- Need shuttle service to provide local access to schools, shops, and community services and reduce traffic near major generators

Special Events/Major Trip Generators

- Increase overall traffic enforcement citywide
- Investigate possible new traffic signal installations at Saratoga-Sunnyvale Road/Verde Vista Lane, Saratoga-Sunnyvale Road/Seagull Way, and Big Basin Way (SR 9)/Pierce Road
- Mountain Winery traffic causes problems on Pierce Road
- Investigate all-way stop signs on Pierce Road at Paramount Drive

City of Saratoga

GENERAL PLAN CIRCULATION ELEMENT UPDATE

COMMUNITY WORKSHOP SUMMARY

NOVEMBER 1999

1. Introduction

2. Objectives

3. Methodology

COMMUNITY WORK STUDY

4. Results

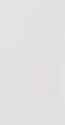
5. Conclusion

6. References

7. Appendix

8. Acknowledgements

9. Bibliography



INTRODUCTION

On September 23, 1999 a community meeting was held to identify goals and issues related to transportation in the City of Saratoga. The meeting provided an opportunity for the approximately 20 community members in attendance to share their perspectives and participate in the process of updating the Saratoga General Plan Circulation Element.

The meeting began with a presentation by Sohrab Rashid of Fehr and Peers Associates. Mr. Rashid gave participants an overview of the existing circulation element and identified some of the trends and issues that are likely to affect the development of the circulation element update. The meeting continued as meeting moderator Danial Iacofano of Moore Iacofano Goltsman, Inc. (MIG) gave participants a description of the circulation element study process and timeline. Mr. Iacofano gave a brief overview of the agenda and explained how public input would be used to guide the planning process.

PUBLIC DISCUSSION PERIOD

Following the introductions and overview, the meeting was opened for public discussion. The following is a summary of the main points raised by speakers. The discussion focused on the following four geographic areas:

- Western/Southern Hills
- West Valley College Area
- Golden Triangle and Surrounding Area
- Saratoga Village

Western/Southern Hills

- Consider using the citizen restraint on traffic (already existent on Pierce Road) in other areas.

- Evaluate the need for a traffic light on Verde Vista Road to address increased congestion caused by school traffic and Mountain Winery visitors.
- Assess the traffic impact of new development along Pierce Road.

West Valley College Area

- Preserve the scenic paths along Allendale and College Roads, as well as the parkway along Quito Road.
- Consider using a sensor-triggered signal like the one at Pollard and Quito in other areas throughout the West Valley College area.
- Analyze increased traffic volume caused by increased student enrollment at the Marshall Lane School.
- Look into better traffic alternatives in and around the Argonaut Shopping Center parking lot.
- Consider the traffic danger associated with construction at the Argonaut Shopping Center.
- Preserve the "small feel" and pedestrian orientation of residential streets, particularly in the areas adjacent to the intersection of Highway 85 and Saratoga Avenue.
- Address the need to clean up the sidewalks along Cox Street.
- Ensure the safety of pedestrians and children around the Redwood School.
- Create a sign that warns pedestrians of traffic dangers at the corner of Scotland Drive and Saratoga Avenue.
- Look into establishing a partnership with the West Valley College in order to better facilitate traffic and parking in the region.
- Increase the speed limit enforcement along Fruitvale and Allendale.

Golden Triangle and Surrounding Area

- Add more yield signs like the one on Via Monte as a way of calming traffic in the area.
- Reestablish a center turn lane (stacking lane) in front of the Quito shopping center and Gene's market.
- Develop ways to mitigate cut-through traffic on Miller Avenue from Cox to Prospect.
- Assess the number of traffic accidents on Miller and Cox and consider treating the thoroughfare as an arterial.
- Address the large volume of traffic that comes off of Highway 85 and uses Cox to cut through to Cupertino.
- Create ways to reduce the speed of cars using Miller as a cut-through (e.g. speed bumps and an island at Cox and Miller).
- Coordinate traffic signals off of Highway 85 to reduce congestion.
- Use the fees collected from traffic violations to provide for street traffic enforcement throughout Saratoga.
- Address the extreme increase in traffic caused by school drop offs and ensure the safety of pedestrians and children.
- Consider that many commuters do not obey traffic signals and/or traffic laws and pose a threat to pedestrians.
- Develop strategies to limit and reduce cut-through traffic (e.g. like in Cupertino-electronic barriers, bumps, and islands).
- Explore circulation partnerships with neighboring municipalities in order to coordinate traffic flow.
- Increase speed limit and traffic violation fees and enforcement.
- Create more scenic pedestrian paths landscaped with native vegetation.
- Adjust traffic signals to serve neighborhood residents rather than commuters.
- Establish "gateway" points on the edge of Saratoga in an effort to enhance aesthetic appearance of roadways.
- Consider using Roseville as a model for roadside landscaping.

Saratoga Village

- Address the need for sidewalks throughout the residential and commercial sections of Saratoga village.
- Develop strategies to mitigate traffic and congestion that extends from the hills onto Big Basin.
- Consider creating some one-way streets to better direct the flow of traffic.
- Look into ways to better facilitate the traffic from the Village onto Highway 9.
- Create more parking in the Village.
- Implement a shuttle service to accommodate pedestrians without cars.

Overall Suggestions

- Ensure that traffic lights and pedestrian signals are synchronize in order to facilitate the smooth flow of traffic citywide.

City of Saratoga

GENERAL PLAN CIRCULATION ELEMENT UPDATE

**COMMUNITY MEETING
SUMMARY**

Prepared By: MIG, Inc.

OCTOBER 1999

1. The purpose of this meeting was to discuss the progress of the project and to identify any problems that may arise.

2. The meeting was held on the 15th of January 1964, at the offices of the Department of Defense.

3. The following items were discussed:

- a. The progress of the project to date.
- b. The results of the recent tests.
- c. The problems encountered during the tests.

COMMUNITY MEETING

4. The meeting was attended by the following persons:

5. The meeting was held on the 15th of January 1964, at the offices of the Department of Defense.

6. The following items were discussed:

- a. The progress of the project to date.
- b. The results of the recent tests.
- c. The problems encountered during the tests.

7. The meeting was attended by the following persons:

8. The meeting was held on the 15th of January 1964, at the offices of the Department of Defense.

9. The following items were discussed:

10. The meeting was held on the 15th of January 1964, at the offices of the Department of Defense.

11. The following items were discussed:

- a. The progress of the project to date.
- b. The results of the recent tests.
- c. The problems encountered during the tests.

12. The meeting was attended by the following persons:

13. The meeting was held on the 15th of January 1964, at the offices of the Department of Defense.

14. The following items were discussed:

- a. The progress of the project to date.
- b. The results of the recent tests.
- c. The problems encountered during the tests.

15. The meeting was attended by the following persons:

**SUMMARY OF PUBLIC WORKSHOPS
(September 23, 1999 and November 6, 1999)**

ALABAMA DEPARTMENT OF PUBLIC SAFETY
September 18, 1962 and January 2, 1963

CI.6.11 The City will retain all existing and dedicated trails and pathways until it is determined that these trails and pathways are not necessary to accomplish the goals of the trails and pathway plan of the circulation element.

CI.6.11 (Imp) (The policy is specific and does not require an implementation measure.)

CI.6.12 Review the present equestrian zones and analyze their consistency with the trails and pathways plan of the circulation element.

CI.6.12 (Imp) (The policy is specific and does not require an implementation measure.)

CI.7.0 Develop a circulation plan to show logical means of egress and ingress to undeveloped areas of the City and its Urban Service Area.

CI.8.0 Encourage the preservation of the width and appearance of those roads designated as heritage resources by the City.

CI.8.1 Encourage residents of streets and roads believed to have historic merit to nominate those rights of way for designation as heritage lanes.

CI.8.1 (Imp) Implement through Heritage Preservation Commission.

CI.8.2 The designation of heritage lane shall not preclude City action necessary to guarantee safe access for emergency vehicles while maintaining the integrity of the existing heritage lane.

CI.8.2 (Imp) Implement through Subdivision Ordinance

CI.9.0 Minimize the City's financial risks for maintenance of streets and roads.

CI.9.1 Prior to accepting any dedication of streets, the financial risks of maintenance costs shall be evaluated. Based on this evaluation, the City shall determine if the dedication of the street will be accepted.

CI.9.1 (Imp) (The policy is specific and does not require an implementation measure.)

CI.10.0

Traffic impacts that could create excessive noise, safety hazards, and air pollution shall be mitigated. The City shall use the standards established by the State of California and in effect on February 14, 1983, to determine what constitutes excessive noise, safety hazards, and air pollution until the City adopts its own standards or more restrictive standards are adopted by the State.

CI.4.3 (Imp) Modify Zoning Ordinance accordingly.

CI.4.4 The setback and landscaping requirements established in the Zoning Ordinance for commercial and multi-family residential structures on corner lots adjacent to arterial streets may be increased to reduce the visual impact of such structures and to enhance the appearance of important intersections. The City shall determine the extent and configuration of the landscaped areas necessary to create attractive developments on such corner lots through the design review process.

CI.4.4 (Imp) Modify Zoning Ordinance accordingly.

CI.5.0 Use presently planned street capacities in determining land uses and acceptable development densities. If it is determined that existing streets need to be improved to accommodate a project, such improvements shall be in place or bonded for prior to issuance of building permits.

CI.5.1 The City shall require adequate access in keeping with the density of development.

CI.5.1 (Imp) Implement through Subdivision Ordinance

CI.5.2 The City shall establish a minimum acceptable level of service for city streets during peak travel periods. Development which will have the potential to lower the level of service below the standard shall be changed so that the acceptable level of service shall be maintained.

CI.5.2 (Imp) Develop level of service criteria based on accepted traffic engineering methods. Service criteria shall be developed for arterials, collectors, and feeder streets and made part of the Circulation Element of the General Plan.

CI.6.0 Integrate safe bicycling, walking, and horseback riding into the total transportation system.

CI.6.1 Bicycle lanes shall be designated only where a road can accommodate them safely.

CI.6.1 (Imp) Modify trails and pathways portion of General Plan to include bicycle lanes and implement safety criteria.

CI.6.2 Parking shall be prohibited in designated bicycle lanes on thoroughfares and collector streets.

CI.6.2 (Imp) Adopt required ordinance.

CI.6.3 Where economically feasible, the bicycle route system should connect with the bicycle routes of adjacent communities, thereby increasing their accessibility to Saratogans.

CI.6.3 (Imp) Study existing bicycle route systems and determine the necessary modification appropriate to the City's adopted trails and pathways.

CI.6.4 Rights-of-way of the West Valley Corridor, expressway, Santa Clara Valley Water District and utilities shall be used for trails wherever feasible.

CI.6.4 (Imp) (The policy is specific and does not require an implementation measure.)

CI.6.5 Encourage equestrian and pedestrian trails and pathways along roadways in areas where safety and aesthetics permit. Equestrian pathways should relate to the equestrian zones.

CI.6.5 (Imp) Review trails and pathways portion of General Plan to ensure consistency with this policy.

CI.6.6 Motorized vehicular traffic shall be prohibited on trails, pathways, parks and dedicated open space areas except for maintenance and emergency purposes.

CI.6.6 (Imp) Develop, adopt and enforce an ordinance prohibiting motorized vehicles on trails, pathways and parks.

CI.6.7 Assure implementation of the City's trails system requiring trail dedication, construction, and a method of trail maintenance as part of the subdivision or site approval.

CI.6.7 (Imp) Implemented through Subdivision Ordinance

CI.6.8 Trails, sidewalks or separated pathways should be provided in areas where needed to provide safe pedestrian access to schools, along arterial streets and along collector streets.

CI.6.8 (Imp) Review trails and pathways plan to determine if adequate access is provided to schools and along streets.

CI.6.9 Encourage the trails policies noted in the Specific Plan for the Northwest Hillsides.

CI.6.9 (Imp) Include these policies as part of the Circulation Element.

CI.6.10 Bike paths should be placed on both sides of Saratoga Sunnyvale Road where traffic safety permits.

CI.6.10 (Imp) (The policy is specific and does not require an implementation measure.)

CI.2.2 (Imp) Modify Subdivision Ordinance accordingly.

CI.2.3 Through collector streets shall be designed and aligned to minimize adverse impacts on the character of residential neighborhoods through which they pass.

CI.2.3 (Imp) Circulation design guidelines should be developed to be distributed to residential developers.

CI.2.4 The major traffic generators in the City should be provided with adequate access which is the least disruptive to local neighborhoods.

CI.2.4 (Imp) Circulation design guidelines should be developed to be distributed to commercial, industrial and institutional developers.

CI.2.5 Assessment Districts formed to improve existing streets shall be encouraged.

CI.2.5 (Imp) (The policy is specific and does not require an implementation measure.)

CI.2.6 If it is unlikely that a substandard street will be totally improved, the City should take a deferred development agreement as a condition of approval for infill projects rather than requiring improvements concurrent with development.

CI.2.6 (Imp) Modify Subdivision Ordinance accordingly.

CI.2.7 Prior to further development of major residential (4 or more single-family units; 8 or more multi-family units) or major commercial (more than 30 person occupancy) projects along the City's major arterials, the impacts of increased traffic shall be studied and a plan for minimizing these impacts shall be developed to the extent feasible.

CI.2.7 (Imp) (The policy is specific and does not require an implementation measure.)

CI.3.0 Protect the aesthetic, historic and remaining rural qualities of Saratoga through street design and landscaping.

CI.3.1 Minimum City street standards shall be adopted based on location, terrain, character of areas and the anticipated function of the roadway.

CI.3.1 (Imp) Develop general street standard criteria based on varying physical factors and make part of the Subdivision Ordinance.

CI.3.2 Conventional City street development standards, as described in the City's Subdivision Ordinance, should be allowed to vary in order to preserve environmental sensitive roadside features where traffic safety will permit such variations.

CI.3.2 (Imp) Modify Subdivision Ordinance accordingly

CI.3.3 The function of a street shall be recognized in advance of construction, and design criteria used to minimize disruption to the area caused by through or heavy traffic.

CI.3.3 (Imp) Implement through Subdivision Ordinance

CI.3.4 The City shall encourage the planting of trees and plan the development of landscaped medians along major arterials.

CI.3.4 (Imp) (The policy is specific and does not require an implementation measure.)

CI.4.0 Strive for aesthetically pleasing views from all roads in Saratoga and the Sphere of Influence.

CI.4.1 The City shall adopt an ordinance requiring the review of the design, appearance, and setbacks of all new fences, walls, and accessory structures that would be visible from, and on lots adjacent to, the City's arterial streets prior to the construction or issuance of building permits for those new fences, walls and accessory structures. The purpose of this ordinance is the enhancement of the scenic character of the views from these roads.

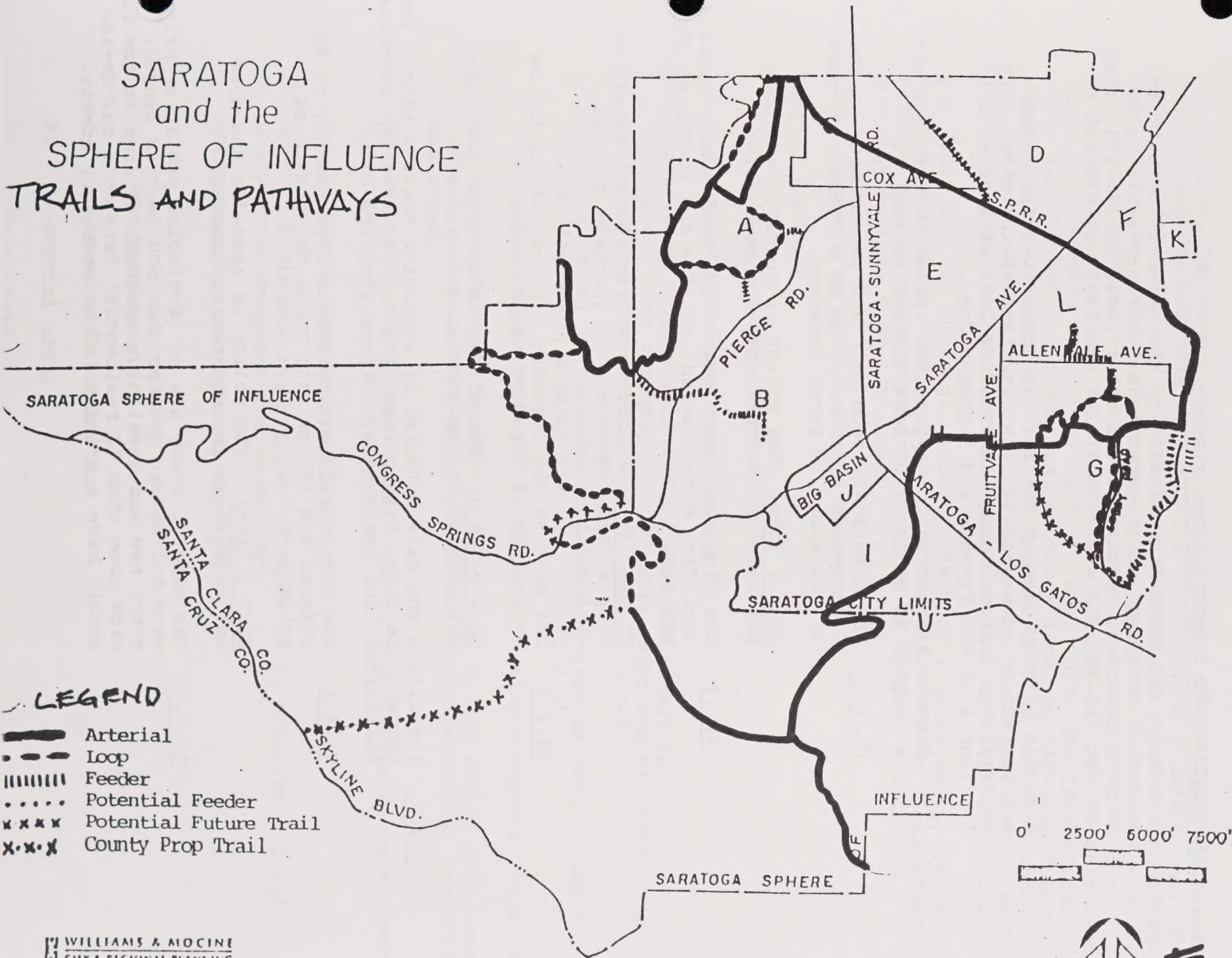
CI.4.1 (Imp) (The policy is specific and does not require an implementation measure.)

CI.4.2 The City shall rigorously enforce ordinances to prevent the use of non-conforming roadside signs on all roads and highways within the City. This shall include the use of all signs whether they be erected by private individuals or business enterprises.

CI.4.2 (Imp) Implement through Sign Ordinance. Reduce authorization time limits for signs in the scenic highway corridor.

CI.4.3 The City shall require increased setbacks of up to 100 feet for structures, walls or fences to be located on lots adjacent to officially designated scenic highways where it is determined by the City that such increased setbacks are necessary to preserve the scenic qualities of the highway.

SARATOGA and the SPHERE OF INFLUENCE TRAILS AND PATHWAYS



CIRCULATION AND SCENIC HIGHWAY ELEMENT (CI)

A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

A scenic highway element for the development, establishment, and protection of scenic highways pursuant to the provisions of Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code.

CI.1.0 Promote a balanced transportation system in Saratoga with attention to energy efficient transportation.

CI.1.1 The City shall encourage and participate in the County-wide implementation of a variety of modes of transport to serve Saratoga.

CI.1.1 (Imp) (The policy is specific and does not require an implementation measure.)

CI.1.2 The City shall work toward improved public transit including more frequent service and access to the village.

CI.1.2 (Imp) Coordinate with County Transit on City efforts necessary to increase transit availability.

CI.1.3 The West Valley Corridor right-of-way shall be designated as a public use corridor.

CI.1.3 (Imp) (The policy is specific and does not require an implementation measure.)

CI.2.0 Facilitate the safe movement of vehicular traffic within and through the City, taking into consideration the environmental, historical, and residential integrity of the City.

CI.2.1 The City shall require public right-of-way to be offered and all private roads designated as collectors.

CI.2.1 (Imp) (The policy is specific and does not require an implementation measure.)

CI.2.2 For safety, every new or developing public or private cul-de-sac greater than 500 feet in length, every new and developing residential area in the City with more than 15 residential lots on a cul-de-sac should have a primary and an emergency access.

Eligible Local Streets

Fortunately, low density zoning and stringent subdivision ordinances protect residential area streets with minimum site frontage measurements and design review. Commercial streets and major thoroughfares need attention. Saratoga Avenue, Quito Road, and Prospect Avenue all need considerable landscaping and/or sign control as well as architectural reworking before they can qualify as urban scenic roads. These improvements would provide the visual unity the residential areas achieve but the commercial sections lack. On Saratoga/Sunnyvale Road, the northern portal to the City, landscaping and sign control are needed. Citizens have expressed concern about the view entering motorists encounter at Saratoga/Sunnyvale Road and Prospect Avenue.

Big Basin Way, in Saratoga, (also subject of a detailed special study) needs much work to make it qualify as scenic or even utilitarian. Perhaps this is the obstacle to the rest of Highway 9 becoming a Designated State Scenic Highway.

Local Measures to Protect Scenic Roadways

City of Saratoga

- . Low density residential zoning
- . Minimum site frontage requirements
- . Subdivision requirements for street arrangement which is "harmonious with topography (and) shall save and preserve ornamental trees where practicable." (Sec. 3.3.-15)
- . Subdivision may be required to landscape area between property wall or fence and a major highway. (Sec. 4.8)
- . Subdivision requirement for landscaping dead end streets. (Sec. 4.9)
- . Planning Commission design review of most single family dwellings, commercial structures, major modifications to commercial structures, and signs.
- . Tree removal prohibition without permit from Community Development Director (Ord. No. 38.26 Sec. 1).
- . Height limits in zoning ordinance.
- . Grading Ordinance the purpose of which is to preserve natural topographic features and vegetation.
- . Priorities for underground wiring:

1. New Development
2. Areas of wide public use
3. Commercial areas
4. Scenic areas

- . Obstruction to view from vehicles are declared nuisances. (Streets and Sidewalks (Sec. 1305.)
- . \$50 reward for conviction for persons throwing trash on highways, (Ordinance, No. 4A Sec. 13-5)
- . Williamson Act protection of agricultural lands.
- . Special ordinances for hillside subdivision to prevent erosion.
- . Scenic easements on hillside subdivisions
- . The aesthetic/scenic qualities policies of the Northwestern Hill-sides Specific Plan.

Santa Clara County

- . Inclusion of road in scenic highway zoning.
- . Williamson Act.
- . Scenic Easements (State and County).
- . Zoning which provides for clustering of service stations and facilities along scenic roads. This has only been used rarely, never in Saratoga's sphere.
- . Minimum lot areas and site frontages in all zones with adjustments based on slope and density.
- . Height limits on buildings.
- . The Scenic Highway Element - 1981 County General Plan

Procedure for Designation Official Scenic Highways

The corridor studies necessary for official designation of a highway as a Scenic Highway must be initiated by the jurisdiction which controls the adjacent lands. The responsibility for the corridor study may be delegated to a department, employee, commission or committee. When such a study is initiated, the District Engineer of the Highway District should be notified. The Highway Division will then undertake two studies called the Corridor Survey which will be joined with the local jurisdiction's study to form the Scenic Highway Report. A specific plan and program must then be developed by the local jurisdiction assisted by the Division of Highway's staff. This plan and program will insure the protection and enhancement of the existing natural and man-made scenic resources that contribute to the Highway's being included in the State Master Plan for Scenic Highways. The plan and program are reviewed by the Highway District's staff and forwarded to the Interdepartmental Committee of Scenic Highways. After review by the Interdepartmental Committee, the report are forwarded to the Scenic Highway Advisory Committee. The Advisory Committee reviews the information and recommends to the Director of the Department of Transportation whether the highway should be designated. County roads may be designated by the County Board of Supervisors after the State Director of Transportation has found all requirements have been met. The standards and requirements for the State Scenic Highways apply to County Scenic Highways; however,

In considering scenic qualities, residential neighborhoods in Saratoga are well maintained with a variety of trees, ample setback, and pleasant architectural quality. On the other hand, major thoroughfares and commercial areas are an area of concern. Efforts should be directed toward improving the visual aesthetics of these streets to complement the scenic character so carefully cultivated in the residential areas.

In the Sphere of Influence, County corridors may be designated County Scenic Roads and protected by the Santa Clara County zoning ordinance #NS-1200, 643-3.3 which requires 100 foot setbacks for building and structures along the scenic route. The County Board of Supervisors, on advice from the State Department of Transportation, designates those roads which qualify (under the same requirements as State Scenic Highways) as officially designated County Scenic Highways.

State Scenic Highways, which may be located in either the City or Sphere of Influence, rely on local zoning and other measures for maintenance and protection. For this reason, the State Department of Public Works must be convinced that local government agencies have taken sufficient steps to protect the scenic corridor by regulating land use and the intensity of development; requiring detailed site planning; and control of outdoor advertising, earthmoving, landscaping, design and appearance of structures and equipment in the area. The State protects the highway by landscaping and by securing adjacent property easements to protect or enhance the motorists' view. Saratoga needs to adopt a Scenic Highways Preservation Ordinance to supplement existing design review regulations. This would ensure adequate protection of existing scenic highways.

To qualify as an Officially Designated State Scenic Highway, scenic beauty is not the only criterion. A highway must be brought up to the standards of a "Complete Highway", one which incorporates safety, utility, economy, and beauty -- only then will the Department of Public Works, on advice from the Scenic Highway Advisory Committee, consider it for Official Scenic Highway status. Once a highway had been so designated, the State will post highway signs and label maps and publications with the California Poppy Scenic Route emblem. This has already been done for Highway 9 (Saratoga-Los Gatos Road).

Saratoga already contains two designated State Scenic Highways and four designated County Scenic Highways. The State Scenic Highways include Route 9 from Los Gatos to Saratoga (ending at the intersection of 9 with 85). The portion of Highway 9 from Saratoga to Skyline Boulevard has been under a State corridor study for several years but has not yet been designated. A Scenic Highway Report for this section of highway was completed in 1976.

State Highway 35, or Skyline, has been also designated an Official State Scenic Highway from Page Mill Road south to the San Mateo/Santa Cruz County boundary. Santa Cruz County has not yet submitted a Scenic Highways program showing it is capable of protecting the corridor; as a result, the portion of Skyline in Saratoga's Sphere of Influence has not yet been designated an Official State Scenic Highway.

The Santa Clara Zoning Ordinance protects several scenic highways in Saratoga and its Sphere of Influence by specifying 100 foot setbacks. These include Skyline Boulevard from Saratoga Gap to Loma Prieta; Congress Springs Road from Saratoga Gap to the City limits of Saratoga, Bohlman Road and a low extension, Montevian Road; and Sanborn Road.

POTENTIAL SCENIC CORRIDORS

Several areas in Saratoga and its Sphere of Influence are being considered or have potential to be protected by the scenic highways designation.

Eligible State Highways

Highways 9 and 35 are the only two State Highways being considered in the State Scenic Highways Master Plan in Saratoga and the Sphere of Influence. Part of Highway 9 is already a Designated Scenic Route; the rest is under corridor study by the State. Highway 35, bordering Santa Clara and Santa Cruz Counties is under the jurisdiction of both counties and the actual "scenic corridor" or view is in Santa Cruz County. Therefore, it will be necessary for Santa Cruz to prepare an acceptable Scenic Highways Program or Plan before the State will officially designate Highway 35; Santa Clara's plan is considered adequate.

State Highway 85 (Saratoga-Sunnyvale Road), although not on the State Master Plan, could conceivably qualify as an urban designated scenic highway. Landscaping and design on a massive scale are needed to upgrade this important entrance to Saratoga. If this is ever accomplished and State Scenic Highway Designation is desired, the legislature can request that this highway be included in the Master Plan.

Eligible County Scenic Highways

Corridors for consideration under the Santa Clara County Scenic Highways Protective Zoning Ordinance are innumerable. In addition to those already enumerated in the Ordinance, Mt. Eden Road in the Sphere of Influence should be considered. County Roads which pass through Saratoga should be upgraded to permit their consideration under the scenic highways zoning provision.

15. North side of Saratoga Avenue from Big Basin Way to Herriman Avenue.
16. South side of Saratoga Avenue from Herriman Avenue to Fruitvale Avenue.
17. North side of Saratoga Avenue from SPRR to Quito Road (with gaps).
18. Along west side of Fruitvale from Saratoga Avenue to Douglass.
19. Along east side of Fruitvale from Allendale to Valle Vista.
20. South side of Allendale from Fruitvale to Quito Road.

BICYCLE PATHS

A Citizen's Committee met to study providing a demonstration bicycle path system in Saratoga. The County has suggested that each community designate a demonstration bicycle route system so that all communities in the County could be joined and accessible by bicycle. The initial stage of the Saratoga demonstration bicycle route system is described here:

1. Generally: Implementation of a demonstration bicycle system on the major streets of Saratoga as soon as practicable. The expansion of the system onto collector streets was viewed with caution and the recommendation in this regard is quite limited. These concerns and other features that apply to the entire system are treated in a section apart from the discussion of each street.
2. Cox Avenue: Primarily a path system on each side of the street with limited use of lanes for transition where paths are not possible. Striped bicycle route, pavement marking should be installed from Saratoga to Paseo Presada.
3. Highway #85 (Cox to Village): Primarily a path system on each side of highway. Difficulty with the system is noted from Reid Lane south to Village.
4. Blaney Plaza: Transition from Highway #85 to Highway #9 presents difficulty. Appropriate signs stating "route ends" and "use caution" are urged.
5. Highway #9 (Village to Fruitvale): This system depends upon installation of path over rock wall from Oak to Aloha. Then there would be a two-way system on the south side from Aloha Avenue to Vickery Avenue. Thereafter, proceeding toward Los Gatos, the system would change to a bicycle lane system on each side of the highway.

6. Fruitvale Avenue: A path system on each side of street from Valle Vista to Allendale; thereafter bicycle lanes from Allendale to Saratoga Avenue.
7. Saratoga Avenue: A striped bicycle route system on each side of street from Cox to Village.
8. Herriman: A bicycle route on each side with parking allowed from Highway #85 to Beaumont. Appropriate signs to indicate route ends before bridge.
9. Miller: No demonstration system; only three-block area from Somerville to East Melinda Circle shall be marked with bicycle lanes to provide safety to hazardous crossing area for Hansen School children.

The City has attempted to implement its demonstration bicycle system but difficulties have arisen in funding the project so it may be delayed.

SCENIC HIGHWAYS

The Scenic Highways Element's legislative authority, stemming from SB1489, was passed into law on April 16, 1971. Saratoga adopted its Scenic Highways Element in 1974. The purpose of the element is to inventory scenic corridors and to develop plans to protect them. The Master Plan for Scenic Highways, adopted by the State Legislature, identifies highways which are eligible for official designation as State Scenic Highways. Eligible highways can only become officially designated by the State after the local jurisdiction has adopted and implemented a plan to protect and enhance the scenic corridor.

The ultimate objective of Saratoga's Scenic Roads Program should be aesthetically pleasing views on all roads in Saratoga and the Sphere of Influence. This is not an unattainable goal. Most roads in the Sphere are scenic and only need to be protected. Most City roads are pleasant, some are scenic; only a few need improvement to make them visually attractive.

Designated Scenic Highways in Saratoga and its Sphere of Influence

A scenic highway provides the motorist with a continuous, varied visual experience. The most important criteria in the selection of a scenic highway is the field of vision for touring vehicles. All types of landscape qualify whether they are urban or rural, natural or cultivated.

6. Judge Welch Trail - In the late 1800s when Congress Springs Resort was at its prime, this trail was a well used route. Judge Welch, who owned the property, welcomed people to use the trail for outings to Castle Rock. It traverses lovely forested mountain slopes and climbs to Mt. Bielawski lookout (3,231 ft.). From Castle Rock Park and the Skyline, a whole vista of public trails to Big Basin and the ocean are open to the hiker and rider. Parks lie at both ends of this trail.
7. Long Bridge Trail - Along fire breaks and jeep trails, this is at present a good trail used by the Boy Scouts riders. From the historical "long bridge" (by Fischer's Resort) it traverses the eastern chapparal covered slope of the San Andreas rift.
8. Congress Springs Canyon Trail - At present this is restricted Water Company property. This trail is an interesting route through a rugged canyon and would add nearby loop hike possibilities to the Saratoga Trails.
9. San Tomas Trail - At present a usable trail, this route could become a major connector to the Skyline. This is a rugged, up and down trail which climbs from the valley to the Skyline traversing many observable ages of geological formations. It passes through a great diversity of flora; chapparal, madrone, oak, tan oak and fir.
10. El Sereno Trail - Along existing road and jeep trails, this trail has many spectacular views of the valley and in the opposite direction the San Andreas rift and Skyline. There are connections to the Los Gatos trail system and Lexington Reservoir. Crossing dry chapparal country with some lovely oak glades, this route makes excellent winter hiking.
11. Toll Gate History Trail - This route lies along the Congress Springs Road, but is not at present an existing trail. The easements for a separate, off-road trail along Saratoga Creek would be desirable. This route was the path of the ancient Indian tribes from their Saratoga Creek encampment to the Skyline and the ocean. Several points of interest are:
 1. The first county lumber mill.
 2. Campbell Cooper Mine.
 3. Macclay's Turnpike Tollgate.
 4. Hakone Gardens.

The trail terminates at the historical "long bridge" crossing of Sanborn Creek (and San Andreas fault) where it meets the Rift Trail, Judge Welch Trail and Long Bridge Trail.

12. Bohlman Trail - This route is an interesting climb from downtown Saratoga (or Hakone) to the Stuart Camp and the other loop trail return routes. Adequate trail easements should be secured along the roadway.

City Pathways

The following is an inventory of existing pathways in Saratoga:

1. Both sides of Saratoga-Sunnyvale Road from Prospect Avenue to Reid Lane (with gaps).
2. East side of Saratoga-Sunnyvale Road from Reid Lane to Big Basin Way (with gaps).
3. East side of Saratoga-Los Gatos Road from Big Basin Way to Wildcat Creek (with gaps).
4. Both sides of Big Basin Way from Saratoga-Sunnyvale Road to Bohlman Road.
5. West side of 4th Street from Canyon View Road to Saratoga Creek.
6. Along Oak Street from 5th Street to Madronia Cemetery.
7. West side of Arroyo de Arguello from SPRR to Wardell Road.
8. East side of Arroyo de Arguello from Wardell Road to its end.
9. North side of SPRR from Prospect Road to Quito Road
10. Southeast side of Carnelian Glen Drive and along a drainage easement connecting Carnelian Glen Drive with Douglass Lane (with gaps).
11. South side of Prospect Avenue from SPRR to Quito Road.
12. North side of Cox Avenue from Saratoga-Sunnyvale Road to Glen Arbor Court.
13. South side of Cox Avenue from SPRR to Paseo Presada.
14. South side of Herriman Avenue and Herriman extension to West Valley College.

TRAILS, PATHWAYS AND BICYCLE ROUTES

For Saratogans, numerous mountain trails and an historical trail have, for many years, been available for recreational use. In addition, equestrian trails are found in the specially designated Equestrian Zones of the City: the Sobey Road area and the vicinity of Pierce Road.

Reliance on the automobile for all but purely calisthenic locomotion has, until recently, eclipsed the advantages of the other ways of "getting around". In the last several years increasingly frustrating traffic jams, air pollution and the high costs of automobile operation and maintenance have contributed to the emergence of a new breed of commuters and shoppers who walk or ride a bicycle whenever they need to go. A consciousness of physical fitness and a desire for outdoor recreation has increased the popularity of walking and biking as well as horseback riding. Also, pathways are needed not just for recreation but for safe access from schools and employment centers to other parts of the City. Therefore, a coordinated system of trails, pathways and bike routes providing links between major traffic generators such as employment centers, colleges, shopping areas, and neighborhoods is needed. This system of routes should also provide access to quiet scenic areas and parks. It should assure persons using non-motorized transportation safety and mobility in pleasant surroundings. The placement of hazard signs for joggers and other trail users at dangerous intersections should be encouraged. The purpose of the trails, pathways and bicycle paths element is to promote civic participation in developing a system of appropriate routes which is integrated into the overall transportation system of the City.

On July 6, 1977, the Trails and Pathways portion of the Circulation Element was amended by the adoption of a Master Trails and Pathways Plan (see Figure 2). This plan followed the broad recommendations of the Trails and Pathways Task Force which were submitted to the City Council in August, 1976. Three arterials were proposed in this plan. The major arterial followed the P.G.&E. right-of-way from Prospect Road near the Fremont Union School District High School site to Quito Road at the junction with the S.P.R.R. tracks. This arterial connects the two other arterials which serve the Pierce Road and Sobey Road equestrian areas. These arterials then connect with proposed County trails in the Sphere of Influence area which connect with Countyparks and other County trails in the Santa Cruz Mountains.

In 1978 the County adopted a Trails and Pathways Master Plan in which members of Saratoga's City Council and Planning Commission were involved through the Planning Policy Committee which formulated the plan. This plan links urban population centers with the great scenic and open space resources available in the County. Since the City's Trails and Pathways Plan compliments that of the County, these resources have been and will be available to Saratoga's residents.

Mountain Trails

There are twelve mountain trails available for hiking and horseback riding in the Saratoga area. The majority of these trails are in the Sphere of Influence. Each of these trails is described here.

1. Mt. Eden Valley Trails - This trail lies along an existing paved road and is an important link with Stevens Creek Park. The rural atmosphere should be preserved with off-road trail easements. Any road construction should make accommodations for bicycles as well. The Pierce Road-Mt. Eden Road route has been indicated in county trail studies.
2. Monte Bello Ridge Trails - These jeep trails and fire breaks are a natural extension of Stevens Creek trails and offer a connection to Palo Alto's trails system along the ridge to Page Mill Road. There are spectacular views of the Santa Clara Valley and the skyline. Several loop hikes are possible.
3. San Andreas Rift Trail - This trail follows the San Andreas earthquake fault line along Stevens Creek, Saratoga Creek and Sanborn Creek. It offers many opportunities for observation and inspection of the classic detail of an earth rift, especially along the jeep trail which connects Stevens Creek and Saratoga Creek. Although this route can be traversed at present, off-road trails are needed along Stevens Creek, Saratoga Creek and Sanborn Road. Park areas lie at both ends of this route; Sanborn Park lies across the rift. This trail has been indicated in County trail studies.
4. Table Mountain Trail - This trail lies on jeep trails and fire breaks through chaparral and oak. There are many fine view points.
5. Loghry Trail - From Saratoga Creek up Booker Creek, this trail may have been the ancient route of the native Indian tribes to their Skyline encampment. Loghry Forest, which was a gift to the State, is the smallest state forest in California, and is scheduled to become a part of Castle Rock State Park. Loghry Forest is planted with many species of trees and shrubs, and has a lookout tower. The trail, which runs over private property, is little traveled and the track is poor at present. This could, however, become a major route from Saratoga to the Skyline and the trails beyond.

Residential areas should be protected from arterials by visual barriers wherever possible. Shopping centers facing on to arterials should have controlled access by using service roads or other focusing techniques.

Since the system of arterial streets is fairly well established in Saratoga, and predominant land use is residential, the collector street is the most likely new major traffic carrier to be added. Some connections will be needed to complete the existing collector system; in other cases new collectors will be required. In order to avoid the conflicts with adjacent residential land uses which now exist on some residential collectors in Saratoga, developers should initially design residential collectors with their function in mind.

Hillside collectors may, in some cases, present a lesser traffic problem to adjacent homeowners, but present a real environmental and visual problem. In these cases split lanes are suggested to mitigate scarring from grading. Periodic parking bays might also be used to permit the smallest feasible cut. Hillside access or local streets could be designed to minimize scarring. Parking bays should be provided periodically and on-street parking prohibited. Walkways or pathways could be separated from the roadway to protect the pedestrian from the roadway and be more in keeping with the country atmosphere.

Mass Transit

For the past several years, Santa Clara County has been studying the problem of mass transit with the assumption that the only economically feasible mass transit system is one that is County-wide. A look at the interdependence among cities in the County, the low densities, and the large distances between the major traffic generators such as important shopping centers, government offices, airports, bus and train stations, colleges, centers of employment and community activities, further supports the need for a Countywide transit system.

Only one per cent of the workers in Saratoga do not have access to a car. Over half have access to two cars, and 16% have access to three cars. The existing residential spread of Saratoga and minimum of local commercial services, entertainment centers and employment centers, make many locations difficult to live in without a car. Saratoga alone cannot economically support a public transit system, but, when combined with the adjacent community a Countywide transit system is workable and financially possible.

The County has served Saratoga with its bus system for over 7 years and currently has three bus lines routed through Saratoga. All bus lines terminate and transfer passengers at West Valley College which is a major traffic generator for Saratoga. Two of the lines stop near the entrance to the Village. The buses run on a half-hour arrival frequency from about 5:00 a.m. to 10:30 p. on weekdays. These transit services make it possible for the elderly, infirm and young people of Saratoga to take advantage of the commercial, recreational, educational, and social services outside of Saratoga on their own.

Railroads

Saratoga is served by a spur line of the Southern Pacific Railroad. The spur extends from San Jose across Saratoga from Prospect Road in the north to Quito Road in the south, and terminates at the Kaiser Permanente Plant in Cupertino. One train a day runs between the San Jose switch yard and the Permanente plant with regular stops at Paul Masson in Saratoga.

Within the City of Saratoga the tracks cross two arterials, Saratoga-Sunnyvale Road and Saratoga Avenue; two collectors, Via Roncole and Cox Avenue; and one local street, Glenbrae. All track crossings in the City are at grade and only three are protected by automatic safety gate warning systems, Via Roncole, Glenbrae, and Saratoga-Sunnyvale Road. Although not in the City, the railroad crosses two major access roads to the City, Prospect and Quito roads. The County sets the priorities for installation of automatic safety gates on these roads.

State highway projections for 1990 indicate increases on the City's arterials, particularly at the intersection of Saratoga-Sunnyvale (Route 85) and Saratoga-Los Gatos Road from the intersection with Saratoga-Sunnyvale Road (Route 85) to Quito Road. Traffic volumes through the Village on Big Basin Way would not be appreciably affected by a Freeway's presence in the Corridor.

Traffic count projections are not available for local arterials in Saratoga. However, Cox Avenue, Fruitvale Avenue and Quito Road can be expected to carry increased traffic volumes with increases in County population.

One of the major traffic generators in Saratoga is West Valley Community College. The College, located at the intersection of Fruitvale and Allendale Roads, stimulates heavy volumes of traffic on Saratoga Avenue to Fruitvale, and Quito Road to Allendale, and across Allendale from Quito to Fruitvale. Intersection and street improvements at Saratoga Avenue and Fruitvale have relieved some of this pressure. Better use of the Lawrence Expressway will depend upon the improvement of Quito Road and upgrading of Allendale to an arterial. It is currently anticipated that the enrollment of the College will stabilize. As a result, these improvements are anticipated to be adequate for the foreseeable future.

Collector Streets

Collector streets serve an important function in residential Saratoga. They provide access from residential areas to local traffic generators such as schools, local shopping centers or community centers, as well as safe connections to the City's arterial system.

Citizen complaints, accident reports, and traffic counts indicate that the major problem on existing City collector streets in most cases is not volume but speed control. In a few isolated cases where neighborhood collector streets aid in filling in for the inadequacies of the City's arterial system or provide the only access to a relatively large area, the collector may carry as many as 2,000 to 3,000 cars. In most cases, the average ADT is well below this. Disregard for speed limits by many City residents, however, creates safety problems on almost all the City's collector streets.

Future traffic volumes on the majority of the City's existing collector streets is dependent upon the number of trips by homeowners. There are, of course, some exceptions in the City where the collector streets are so constructed that they have the potential of serving as through routes for other City residents. For example, the wide spread between Saratoga-Sunnyvale Road and Saratoga Avenue has generated some pressure on Miller Avenue, Titus Avenue and Homes/Brookglenn Drive for an intermediate through route.

Those collectors whose location is such that they are also filling in for inadequacies in the City's arterial system present a different problem. Streets which have this potential should be recognized before construction and appropriate actions taken to protect future home owners from the problems of higher traffic volumes. Those areas where collector streets currently are doing double service and supplementing the arterial system need specific study which goes beyond the scope of the General Plan.

Every residential neighborhood in Saratoga appears to be adequately served with collector street access for safety and resident convenience except for the area bounded by Saratoga Avenue-Fruitvale Avenue-Saratoga-Los Gatos Road. While there are three designated collectors in this area, two spurs of Douglass Lane and LaPaloma, none traverse the area. Residents of this neighborhood seem to prefer the protective nature of the existing circulation system to the convenience of a through collector. Both the fire and sheriff's departments feel that existing access to this area is adequate. Additional residential development in the area might alter the situation in the future, but currently, the street system appears to adequately satisfy the needs of the neighborhood's residents.

The primary function of a local street is to provide access for safety vehicles and residents to the property adjacent to the public right-of-way. Since service is their primary purpose, local streets usually do not carry through traffic. The major problem on local streets in Saratoga is speed control. In 1976, a speed zone study was completed by TJKM Planning and Transportation Consultants which recommended speed limits for specific streets. These limits have since been imposed by the City in an effort to alleviate the problem.

Road Design

The roadways, whether access or arterials, are the corner stone to Saratoga's country atmosphere. While it is essential that roads be designed to safely serve the specific function determined by their location, the area served and potential traffic use, this can be done without urbanizing the countryside. Much of the flat area of Saratoga has been developed. However, in the more hilly area of the City and steeper Urban Service Area, the formally curbed and guttered access streets seem less appropriate, particularly when crossing the face of a hill or serving a hillside development. A better alternative might be to have a variety of City street standards depending upon the character of the area and the development. This is not to recommend poorer quality streets or inferior drainage; but rather to provide a variety of acceptable standards which can be more compatible with the natural environment of the area. These policies are reflected in the Specific Plan for the Northwestern Hillside.

THE CIRCULATION AND SCENIC HIGHWAY ELEMENT

Saratoga inherited its basic pattern of arterials from days before incorporation. In the past, Saratoga was an area traversed from a natural pass through the mountains to San Jose or southwest to Gilroy and beyond. The pattern of radiating arterials, Route 85, Route 9, Saratoga Avenue and Quito Road, from Big Basin Way provides less efficient access now that destinations of travelers are more dispersed. The radiating arterials soon become more than a mile apart. This distance creates a need to connect arterials to allow more efficient traffic movement between arterials and their destinations. Since traffic generally finds the route of least resistance (time/distance) some of the better located collectors have provided substitutes for missing arterials.

Generally, radical reclassification and upgrading of streets in Saratoga is not necessary to meet the existing and anticipated future vehicular needs. However, it is important that the City recognize that in some cases it must live with the historical deficiency on all modes of transportation but particularly on vehicles.

DATA AND FUTURE USES

Automobile and Roads

The low density residential character of Saratoga which is critical to the City's life style has committed the City (at least for the foreseeable future) to the automobile as the major mode of transportation. With this in mind, it is necessary to examine the internal movement in patterns and accesses to major traffic generators beyond the City limits, and to provide City residents with the safest and most efficient road system possible while continuing to protect the intrinsic character of Saratoga.

Freeways and Expressways

The major freeways now serving Saratoga include Junipero Serra (280), Santa Cruz (17) and Bayshore (101). From these freeways local residents can connect with a variety of major Statewide traffic carriers and reach virtually any point in the State.

For the past 23 years, the State Division of Highways has shown a freeway traversing the northeast corner of the City of Saratoga. This proposed West Valley Freeway would extend from Highway 280 in the northwest to 101 in the vicinity of Morgan Hill in the southeast. The State owns most of the parcels that make up the freeway

corridor but it is not known when the State will have sufficient funds to acquire the remaining parcels to complete the right-of-way. Some communities such as Los Gatos have allowed development on parcels designated as part of the corridor. It is possible Saratoga might also allow, or be compelled to allow by the courts, development of parcels within the proposed corridor. Such actions would make acquisition more difficult and thus delay any use of the corridor. The Environmental Impact Report for the project was completed in 1980. At that time, it was reaffirmed by Saratoga that the corridor right-of-way should be preserved.

The Lawrence Expressway extends from Highway 101 to the intersection of Saratoga Avenue and Quito Road providing a major access to the northeast portion of the City. The expressway terminates at this intersection and through traffic continues on Quito Road to Route 9.

Arterials

The City of Saratoga is served by nine arterial roads. Arterials are major traffic carriers which take cars through the City to and from the major traffic generators in the City. Three of these arterials are State highways; Saratoga-Sunnyvale Road (Route 85), Big Basin Way (Route 9) and Saratoga-Los Gatos Road (Route 9). These State highways radiate from a hub, the intersection of Route 85 and 9 and continue through the adjacent communities to the freeway system. Saratoga Avenue, a local arterial, bisects the area between the State highways. Quito Road and Fruitvale Avenue serve as arterials for north-south traffic wanting to avoid the Route 85-9 intersection. Pierce Road is currently designated as an arterial north of Arroyo de Arguello for residents living in the westerly section of the City and in the Sphere of Influence beyond, who want to avoid the intersection of Route 85 and 9. Mt. Eden Road is a designated arterial off Pierce Road which provides access to the Cupertino Sphere of Influence, particularly Stevens Creek Park. Cox Avenue provides an east-west arterial in the City. It connects the major radiating arterials in the City, Saratoga-Sunnyvale Road, Saratoga Avenue, Saratoga-Los Gatos/Quito Road.

Available 1979-81 traffic counts indicate that the most heavily traveled arterials are Saratoga Avenue north of Cox Avenue (ADT 27,537), Saratoga Avenue south of Cox (ADT 20,218), Quito Road which carries 24,000 ADT near Lawrence Expressway dissipating to 12,000 ADT near Allendale, Saratoga-Sunnyvale which carries 20,000 ADT at the junction with Highway 9 and 29,000 ADT at its junction near Prospect Road, and Saratoga-Los Gatos Road which carries 21,300 ADT at the junction with Highway 85 and 30,500 ADT at its junction with Quito Road.

**CURRENT CIRCULATION AND
SCENIC HIGHWAY ELEMENT
(Adopted in 1983)**

TABLE A-1 Signalized Intersection Level of Service Criteria Using Average Stopped Vehicular Delay		
Level of Service	Average Stopped Delay Per Vehicle (Seconds)	Description
A	≤ 5.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
B	5.1 to 15.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C	15.1 to 25.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D	25.1 to 40.0	Operations with longer delays due to combinations of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E	40.1 to 60.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
F	> 60.0	Operations with delays unacceptable to most drivers caused by over-saturation, poor progression, or very long cycle lengths.
Source: <i>Highway Capacity Manual</i> (Special Report 209, Transportation Research Board, 1985).		

TABLE A-2 Level of Service Criteria for Unsignalized Intersections		
Level of Service	Average Total Delay Per Vehicle (Seconds)	Description
A	≤ 5.0	Little or no delay.
B	5.0 to 10.0	Minor delays.
C	10.0 to 20.0	Average delays.
D	20.0 to 30.0	Moderate delays.
E	30.0 to 45.0	Lengthy delays.
F	> 45.0	Excessive delays/gridlock.
Source: <i>Highway Capacity Manual</i> (Special Report 209, Transportation Research Board, 1994).		

General Information	
Case No.	100-100000-100000
Date	10/10/10
Page	1
Subject	100-100000-100000
Object	100-100000-100000
Location	100-100000-100000
Time	100-100000-100000
Person	100-100000-100000
Vehicle	100-100000-100000
Weapon	100-100000-100000
Other	100-100000-100000

Detailed Information	
Case No.	100-100000-100000
Date	10/10/10
Page	2
Subject	100-100000-100000
Object	100-100000-100000
Location	100-100000-100000
Time	100-100000-100000
Person	100-100000-100000
Vehicle	100-100000-100000
Weapon	100-100000-100000
Other	100-100000-100000

LEVEL OF SERVICE TABLES FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS

These tables are used to determine the level of service for a given intersection.

1. For the design volume, V_d , determine the level of service for a given intersection.

2. For the design volume, V_d , determine the level of service for a given intersection.

3. For the design volume, V_d , determine the level of service for a given intersection.

4. For the design volume, V_d , determine the level of service for a given intersection.

5. For the design volume, V_d , determine the level of service for a given intersection.

6. For the design volume, V_d , determine the level of service for a given intersection.

The Level of Service

The level of service is a measure of the quality of service provided by a given intersection. It is a measure of the degree to which the intersection meets the needs of the users. The level of service is determined by the design volume, V_d , and the design speed, V_s .

LEVEL OF SERVICE TABLE FOR HIGH FLOOD AND
DESIGNATED BY THE BOARD

- Promote safe and pleasant conditions for residents, motorists, pedestrians, and bicyclists on neighborhood streets.
- Enable social interaction among neighborhood residents.
- Control the amount of traffic that uses neighborhood streets and limit vehicle speeds to levels stipulated by the California Vehicle Code.
- Preserve and enhance pedestrian and bicycle access to neighborhood destinations.
- Encourage citizens to be directly involved in neighborhood traffic management activities.
- Provide a process that will equitably address requests for action by neighborhood residents and will balance resident needs with all users of City streets.

In pursuing these goals, the City supports the following policies:

- To the extent feasible, through traffic should be routed to Arterial Streets, Regional Routes and Highways and away from neighborhood streets.
- Access for emergency vehicles should be preserved at levels that meet City response standards.
- The City will cooperatively work with its citizens to employ a variety of measures that achieve the traffic speed and volume standards set forth in these guidelines and the Circulation Element.
- Permanent NTM facilities will be designed in conformance with sound engineering and planning practices and should complement the residential character of the neighborhood
- NTM activities employed along particular street corridors should not create sub-standard traffic conditions on other streets.
- Residents and property owners within an area where NTM facilities are installed should be prepared to share in the cost of their installation.

The NTM Process

This section spells out how citizens, City staff members, and the Public safety Commission work together to address neighborhood traffic problems. For most *small-scale* problems, residents need only contact the Public Works Department. For *large-scale* problems, a more complex

process may be necessary that involves neighborhood residents and other citizens in developing equitable and affordable solutions

Defining Small-Scale Problems: For purposes of carrying out these guidelines, the City considers the following to be small-scale NTM problems:

- There are parked vehicles, landscaping or other obstacles that block views of traffic at intersections.
- Motorists fail to fully stop at a particular intersection with stop signs.
- Motorists park along the curb and block driveway entrances.
- There are not adequate gaps in the traffic to allow pedestrians or motorists to cross the street at a particular intersection or location.
- Traffic speeds are excessive along a segment of street that is less than one block long (less than 600 feet long).
- There are a few neighborhood residents that drive too fast down a particular street.
- Traffic collisions reoccur at a particular location.
- Motorists drive around a curve too fast and do not stay within the travel lanes.
- Other problems along residential local streets that can be resolved with the installation of stop signs (requires satisfaction of warrants or additional technical review).
- Other problems as determined by the City Traffic Engineer that may impact single intersections or small street segments.

Other *related* concerns that are not considered NTM problems include, but are not limited to: sight distance restrictions at driveways, illegally parked vehicles, damaged roadway sections curbs and sidewalks, and parking intrusion. These issues should be addressed to the appropriate City division (e.g., Building Division or Sheriff's Department).

Verifying That The Problem Exists: City staff will review the problem in the field. For some types of problems, such as speeding or illegal parking, the staff may conduct traffic surveys to verify the extent and persistence of the problem. The results of these field reviews will be noted on the *Citizen Action Request Form*.

Taking Corrective Action: After the problem has been verified, City Staff will contact the citizen, inform the citizen of the conclusions of the field review, and discuss options for eliminating or reducing the problem if one exists. The goal of this discussion is to establish what the City intends to do to address the problem. It should be clear that not all problems have

solutions and that some solutions may, in reality, be too expensive or may raise other issues. The staff will note the established course of action (if any) and will take the necessary steps to carry it out.

Solutions to some small-scale problems may require that residents living in proximity to the problem location support the solution. City Staff will inform the requesting resident when this type of support is needed, usually handled through a petition process.

Paying for Solutions: As a general rule, the City will pay for solutions to small-scale problems where the area affected by the solution is within a public right-of-way or public easement. Adjoining property owners will be responsible for the cost of solutions or parts of solutions located on private property. An exception to this general rule is the installation of stop signs at intersections where traffic conditions do not *warrant* their installation – in this case, affected residents will pay for the stop sign installation.

Monitoring Results and Modifying Solutions: City staff will periodically review how the solution to the problem is working. The staff may modify the solution to improve its effectiveness or to eliminate unforeseen problems. Residents may contact the staff during the first few months after its installation to provide feedback on how a solution is functioning.

Large-Scale NTM Problems: Residential Local & Collector Streets

Defining Large-Scale Problems: For purposes of carrying out these guidelines, the City considers the following to be large-scale NTM problems:

- Traffic speeds are excessive along a segment of street that is more than one block long (600 feet or more long) and multiple intersections are involved.
- Traffic speeds are excessive along more than one street corridor within a residential area.
- Traffic volumes are excessive along one or more street corridors within a residential area.
- Motorists fail to fully stop at multiple intersections with stop signs.

In general, *large-scale* NTM problems involve excessive traffic speeds or volumes that affect long segments of a residential street, multiple intersections, or a number of street corridors within a particular residential area. Resolving these types of problems often requires an *area-wide* approach and involves residents, landowners, and motorists driving through the area.

- If City staff determines that the problem is large-scale, the resident is informed that the problem must be validated by at least two other households along the street corridor

where the perceived traffic problem exists. Validation may be accomplished by households submitting letters of concern or by a petition.

The purpose of validating the problem is to ensure that there is agreement among some neighborhood residents that a large-scale problem exists and that it is not just the perception of a single household. If the problem is not validated, the NTM process ends.

Defining the Study Area: City staff will review traffic conditions in the field with the goal of defining the area that is experiencing the problem(s). They may count motor vehicles or survey their speeds at a few test locations to help define study area boundaries. Based on this staff review, the study area may extend beyond those street segments that were of initial concern. As the NTM process continues, the study area boundaries may be changed to include adjoining areas as more residents become involved.

Surveying Traffic Conditions: Once the study area has been mapped, City staff will conduct a number of vehicle counts and speed surveys within the area. This type of work will be done only during the fall, winter and spring quarters and non-holiday periods of the year, since traffic conditions during summer months are often significantly different. The purpose of this work is to document area traffic conditions and to verify whether a large-scale problem exists - whether traffic speeds or volumes exceed standards set by the Circulation Element.

City staff will prepare a brief report that presents the results of the fieldwork and conclusions concerning the presence or absence of a large-scale NTM problem. The report will be made available to the households involved in the problem validation process. If traffic conditions exceed standards set forth in these guidelines, the NTM process will continue. If traffic conditions do not exceed standards, the NTM process will end. The Director of Public Works is ultimately responsible for making this decision.

Asking Study Area Households to Support NTM Efforts: With the study area defined and the large-scale problem verified, the residents will be asked to circulate a petition prepared by City staff to all households.

These materials will describe large-scale NTM problems found in the study area and ask area households to vote on whether a plan should be developed to resolve them. Sample copies are provided in the appendix.

- A vote in support of preparing an NTM Action Plan will be considered successful when at least 25% of all households in the study area vote to support the proposition.
- If the ballot or petition process is successful, the Department of public works will send a letter to owners of rental properties in the study area. The letter will describe the large-scale NTM problems, summarize the NTM planning process, and identify future opportunities for rental property owners to participate.

If the vote is not successful, the NTM process will end. Residents that wish to continue the NTM process may opt to conduct their own promotional campaign within the study area and submit a petition asking for a new vote within 120 days of the tallying of the first vote.

Forming a Neighborhood Action Team - Traffic Management: With support for preparation of a plan, the petitioners will organize a *Neighborhood Action Team* of residents, facilitated by City staff. The purpose of the Action Team is to develop equitable and affordable solutions to large-scale traffic problems in the study area. Action Team membership should provide for fair and equitable representation of study area and community interests.

Involving the General Public: In addition to the Action Team membership provisions described above, special care should be taken to involve the general public in the NTM process, especially when the majority of traffic on a particular street that is being considered for NTM activities is *through traffic* - defined as motorists with origins and destinations outside the study area. As a minimum, the following activities should be undertaken to involve the general public:

- The location, date and place of all Action Team meetings will be advertised in the Telegram-Tribune Newspaper and the public will be invited to attend
- NTM Action Plans will be published in draft form, their availability advertised in the Saratoga News, and the general public invited to submit written comments to the Department of Public Works and to attend any scheduled community workshops or meetings.

Considering Initial NTM Activities: For large-scale problems with speeding traffic, it may be desirable to first try less aggressive measures to solve them before a NTM Action Plan is developed and more aggressive and potentially costly activities are undertaken. If a problem can be solved with few physical changes to a neighborhood at relatively low cost, then the neighborhood and the community at large can benefit through the implementation of what are referred to here as *Initial Activities*.

The table on the following page specifies Initial Activities and identifies when they should be considered as part of an NTM program to address a large-scale problem.

The City encourages Action Teams to employ Initial Activities as a first step toward solving a large-scale traffic problem - especially where people who live within the study area are causing traffic problems. Implementation of Initial Activities often requires the direct participation of study area residents, with the City loaning materials and equipment as necessary.

However, Initial Activities may not be practical in a particular study area given the physical or social characteristics of the neighborhood or the characteristics of the traffic problems themselves. If, after careful evaluation, the Action Team finds that Initial Activities are not appropriate, it may skip this step and proceed with the preparation of an NTM Action Plan.

Initial Activities	Type of Speeding Condition	Where to Employ
Temporary Speed Trailer	Speeding that exceeds the standards set forth in these guidelines	Along Residential Local Collector and Arterial Streets
Traffic Safety Campaign	Speeds that exceed the standards set forth in these guidelines.	On Residential Local and Collector streets where it's estimated that more than 50% of the motorists have origins or destinations <u>within</u> the study area.
Neighborhood Speed Watch Program	85th percentile speed is within 10 mph of the 25 mph standard	On Residential Local and Collector streets where it's estimated that more than 50% of the motorists have origins or destinations <u>within</u> the study area.
Stop Signs	Where 85th percentile speed exceeds standards set forth in these guidelines.	On Residential Local Streets only (2).
Focused Police Enforcement	85th percentile speed exceeds standards set forth in these guidelines. At least 10% of the total daily traffic is exceeding standards by 20 mph or more.	Along Residential Local and Collector Streets.
Devices that do not change the vertical or horizontal alignment or width of roadway (Examples include landscaping, signs, and pavement markings.)	Where 85th percentile speed exceeds standards set forth in these guidelines.	Along Residential Local, Collector and Arterial streets.
(1) This program requires a significant commitment of time by study area residents to carry out. (2) For City policy on the installation and funding of stop signs, see Appendix.		

Paying for Initial Solutions: As a general rule, the City will pay for initial solutions to large-scale problems where the area affected by the solution is within a public right-of-way or public easement

Paying For NTM Activities: Funding the installation of NTM facilities will be the shared responsibility of the City and study area households or property owners. The following provisions will be used to establish funding responsibilities:

Carrying Out the NTM Action Plan: With City Council approval, the Department of Public Works will undertake the following steps:

Installing Temporary Facilities: For *some* types of NTM devices, City staff may find that it is desirable to first install inexpensive temporary facilities. The need to do this will depend on the type of traffic problems being addressed, their scope and severity. For example, it may be desirable to lay out the configuration of traffic circles, medians, bulb outs or other similar devices using cones or reflective pylons and then to witness how motorists navigate around or between them.

The purpose of these types of temporary installations is to test the layout of the design of the permanent device. It is the intent of these guidelines that test periods should be a matter of hours

to a few days. However, it may be appropriate to conduct longer tests -especially for devices that redirect traffic to other street corridors.

If a temporary device is installed for more than a few days, the following should apply:

- Signs that explain the purpose of the facilities should accompany the devices; how long they will be there, and provide a telephone number for interested citizens to call with questions.
- Concern for the aesthetic impact of the facilities may be addressed by their design. Temporary landscaping and other aesthetic treatments should be employed whenever possible.
- The types of NTM devices that are candidates for temporary installations are identified in Table 2 at the end of this document.

Installing Permanent Facilities: Upon completion of the trial period (where applicable), Public Works staff will design or will hire a qualified consultant to design all permanent facilities. The Director of Public Works must approve the final design of all permanent facilities. Following the completion of the design work, the Public Works Department will install or will hire a contractor to install the permanent facilities.

Monitoring Traffic Conditions: No sooner than 180 days (excluding summer months) but within one year of the completion of all permanent facilities, City staff will evaluate conditions in the study area to determine the impact of the facilities and their effectiveness and make adjustments as necessary. City staff may extend the monitoring period when the initial results are inconclusive or when unanticipated changes in traffic conditions have occurred.

At any time, the Director of Public Works may order modifications to or removal of an approved NTM device when the Director determines that the device is creating a hazardous condition.

Removing or Significantly Modifying Permanent Facilities: At any time after the completion of the monitoring period described above, any city resident may request that permanent NTM facilities be modified or removed. These requests will be handled as follows:

- The concerned city resident must fill out a Citizen Action Request Form - a sample copy is included in the appendix to this document.
- The Director of Public Works will review the request and determine whether it can be accomplished without changing the adopted NTM Action Plan. If it can be accomplished without amending the plan, the Director may order the changes.
- Requested changes that require amendment to the adopted NTM Action Plan must follow the same process that adoption of the NTM Action Plan followed - beginning with the initial validation process. All voting and evaluation procedures will still apply.

- City residents requesting significant modifications to or removal of permanent facilities will be responsible for the full cost of these actions, including any restoration required to streets or related pedestrian, bicycle or drainage facilities.

Large-Scale NTM Problems: Residential Arterial Streets

Residential Arterial streets are a challenge to manage because they serve dual and sometimes-conflicting purpose:

- They are meant to carry higher volumes of traffic moving through an area and provide access to major activity centers such as the Village; and
- They provide access to adjoining dwellings and are an integral part of the residential environment.

The preservation of neighborhood character along Residential Arterial streets is *as important* as providing for traffic flow and that traffic speeds should be controlled.

Controlling traffic speed in itself is a challenge because in order to use radar to cite speeding motorists, the California Vehicle Code requires that speed limits be set at the 85th percentile speed of traffic on the street. (The 85th percentile speed is often higher than what residents consider an appropriate speed in housing areas.)

For some sections of a Residential Arterial street, where the roadway is 40 feet wide or less and is bordered by housing, the California Vehicle Code allows the City to consider establishing and enforcing a residential speed limit that is not based on the 85th percentile speed of traffic. These conditions may meet the *prima facie* requirements of the code. Both Saratoga Avenue and Pierce Road could be classified as Residential Arterials with widths of less than 40 feet.

Finally, it may be difficult to manage traffic speeds on Residential Arterial streets because most motorists using these streets do not live along them. For this *user group*, concern for direct access without delay is usually more important than *quality of life* concerns raised by adjoining residents. It is difficult to convince motorists that additional delay and inconvenience is justified since they may feel that residents who live along an arterial street represent a minority of its users or that the residents decided to live there knowing that it was an arterial street. Addressing the interests of motorists and adjoining residents is the essence of this management challenge.

What Can Be Done: Residential Arterial streets are intended to enable access from one part of the community to another. To address traffic management issues along these types of streets, concerned residents should review options for NTM activities shown in Figure 2 (**NEED THIS FIGURE**) and contact City staff. The staff will work with the concerned residents to establish a feasible course of action if one exists. Table 2 in the

next section of this report identifies the types of NTM tools that may be employed along Residential Arterial streets.

The Neighborhood Traffic Management Toolbox

What is an NTM Tool?

An NTM *tool* is a physical device (such as a speed hump or traffic circle) or an activity (such as police enforcement) that alters the driving behavior of motorists. This chapter describes the various types of NTM tools that may be used in San Luis Obispo to resolve or reduce NTM problems.

Drawers in the Toolbox

The NTM toolbox is summarized on Figure 2 on the following pages. Applying the right tool or combination of tools to an NTM problem requires an understanding of the primary *purpose* and *effectiveness* of each tool. Therefore, we have arranged our toolbox into "drawers" based on the primary purpose of a particular device:

There is overlap between these drawers. For example, a device that slows traffic down may also reduce traffic volumes and vice-versa. Table 2 (**NEED THIS TABLE**) provides a qualitative assessment of how each tool impacts traffic volumes and speeds.

The Right Tool for the Right Type of Road

This program applies to Residential Arterial, Collector and Local streets. But not all tools are appropriate for all types of residential streets. For example, closing a street by installing a barricade is not appropriate for Residential Collector or Arterial streets because it would conflict with the basic *purpose* of these streets, which is to handle some level of through traffic. Therefore, Table 2 identifies the types of residential streets where each specific tool may be used.

Other Limits on Applying Particular Tools

Particular physical setting or traffic conditions in the area may limit selecting the right NTM tool. For example, speed humps should not be allowed on primary access routes for emergency vehicles. It is not possible to identify all desired design features of a particular tool in these guidelines. However, there are some features of a particular tool that may be needed to make them more effective or to provide for desired types of access. For example, medians installed in

the center of streets should include *mountable curbs* at key locations so that emergency vehicles can drive across them. Table 2 identifies these particular design features.

Table 2: City of Saratoga NTM Toolbox (Not officially adopted)

Device/Activity	Description	Reduce Volume (1)	Reduce Speed (1)	Apply to Street Type (2)			Other Application Limits	Design Principles	Candidate Temp. Activity/Facility
				RL	RC	RA			
The Speed Control Drawer									
Speed Trailer	Illuminated display shows speed of passing motorist	No	Varies	Yes	Yes	Yes	Typically use in combination with other NTM devices/activities		No
Speed Alert Program	Residents use radar to clock speeds & motorists receive notice in mail	No	Varies	Yes	Maybe	No	See guidelines section & Appendix	See appendix for program details	No
Pavement Striping/ Marking	Alert motorists to special conditions	No	Possible	Yes	Yes	Yes			No
Stop Signs	Used to manage traffic flow at intersection	Seldom	Varies	Yes	Yes	Maybe		See Appendix F for installation procedure	No
Speed Hump (5 to 10cm high & 3.7m wide)	Raised sections of roadways with curved transitions	Possible	Yes	Yes	Maybe	No	Prohibiting on primary emergency access routes (3)	Humps should stop at edge of asphalt and be installed in series	No
Speed Table (7-10cm high and 6.7m wide)	Speed humps with long flat sections	Possible	Yes	Yes	Yes	No	Prohibited on primary emergency access route	Tables should stop at edge of asphalt	No
Traffic Circles and Roundabouts	Raised devices in an intersection that direct traffic into a circular pattern	Possible	Yes, close to circle	Yes	Yes	Maybe		Where located on a designated bikeway, ensure enough room for bikes & cars to drive. Install in series	Yes
Parking Arrangement	Arrange curb parking to narrow roadways	Possible	Likely	Yes	Yes	Maybe			No
Textured-Colored Pavement	Special markings and composition to alert drivers to special conditions	Not Likely	Possible	Yes	Yes	Maybe		Care should be taken in selecting materials so that resultant tire noise is not a problem for nearby residents	No
Mid-Block Slow Points, Chicanes	Curbs that protrude into road that leave a single lane or narrow two lanes	Yes	Yes	Yes	Yes	No	Prohibited on primary emergency access routes	Allow two narrow travel lanes to pass by with “cut throughs” if on a designated bikeway.	Yes

(1) The source of these qualitative ratings is taken from *A Guidebook for Residential Traffic Management*, Final Report, December 1994, Washington State Department of Transportation

(2) **RL** = Residential Local **RC** = Residential Collector **RA** = Residential Arterial

(3) **Primary Emergency Access Routes** are those listed in Appendix to this document

Device/Activity	Description	Reduce Volume (1)	Reduce Speed (1)	Apply to Street Type (2)			Other Application Limits	Design Principles	Candidate Temp. Activity/Facility
				RL	RC	RA			
Meandering Street Design	Shift curb parking from one side of the street to another to create non-linear alignment	Likely	Possibly	Yes	Maybe	No	Don't install where more than 70% of the curb areas on both sides of the street are used for p.m. resident vehicle parking	Protect parking bays with curb extensions at shift points whenever possible	Yes
Woonerf	Residential area where street is extension of front yard and roadway is shared by motorists, pedestrians and bicycles.	Yes	Yes	Maybe	No	No	Only <i>consider</i> on low-volume local streets (less than 200 vehicles per day) with resident support and financial participation	Will require a comprehensive custom design of facilities	No

The Volume Control Drawer									
Turn Prohibition Sign	Regulatory sign at intersection	Yes	Likely	Yes	Yes	Maybe			Yes
One-Way Streets and Signs	Establish on-way traffic pattern	Likely	Possible	Maybe	Maybe	No	Don't use on designated bikeway unless parallel route equal quality available		No
One-Way Entry-Exit Chokers, Half Closures, Semi-Diversers	Barrier to traffic in one direction which permits traffic in the opposite direction to pass through	Possible	Yes	Yes	Maybe	No	Prohibited on primary emergency access routes	Provide for through bike passage	Yes
Forced Turn Islands, Barriers, & Channelization	Prevents traffic from making turns at an intersection	Yes	Likely	Yes	Yes	Maybe		Require mountable curbs to enable emergency vehicle crossing	Yes
Median Barriers	Barrier in center of road that prohibits left turns or cross traffic	Yes	No	No	Maybe	Yes		Require mountable curbs to enable emergency vehicle crossing	Yes
Expanded Landscape Parkways	Remove curb parking along street and install landscaped parkways	Yes	No	No	No	Yes			
Diagonal Diversers	Barrier placed diagonally across an intersection to force drivers to turn	Yes	Likely	Yes	No	No	Prohibited on primary emergency access routes	Provide for through bike passage	Yes
Street Closures	A complete barricade of a street at an intersection or creating a cul-de-sac	Yes	Yes	Yes	No	No	Prohibited on primary emergency access routes	Must provide adequate turn around area consistent with city standards	Yes

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Device/Activity	Description	Reduce Volume (1)	Reduce Speed (1)	Apply to Street Type (2)			Other Application Limits	Design Principles	Candidate Temp. Activity/Facility
				RL	RC	RA			
The Safety Drawer									
Truck Prohibitions	Regulatory signs at intersections	Minor	Varies	Yes	Yes	Maybe	Not installed on designated truck routes		No
Enforcement (Visible & active police presence)	Emphasize patrols on specific corridors	Not Likely	Varies	Yes	Yes	Yes	See guidelines section and appendix	See appendix	Yes
Marked Crosswalks	Painted pedestrian crossing areas	No	Possible	Yes	Yes	Yes			No
Bicycle Lanes	Lanes in the road reserved for bicycles	No	Varies	No	Maybe	Yes		Meet minimum design standards of Bike Plan	No
Curb Extensions (at entries or exits and at mid-block locations)	Extend curb into road to create narrower crossing or protect parking bay	No	Yes	Yes	Yes	Yes (intersections only)		On designated bike routes, ensure that there is enough room for bikes and cars to comfortably pass	Yes
Raised Crosswalk	Similar to a Speed Table with marked crosswalk	Possible	Yes	Yes	Yes	Maybe	Prohibited on primary emergency access route	Crosswalk flush with top of curb with markings	No
Median-Entry/Exit Islands (with or without signage)	Islands that narrow road at entry/exit points	Possible	Yes, close to circle	Yes	Yes	Maybe		May need to use mountable curbs to accommodate emergency vehicles	Yes
Median Mid-Block Islands	Creates a narrower road and provides a pedestrian refuge	No	Likely	Yes	Maybe	No			Yes
Raised Intersections	An entire intersection in the roadway is raised to sidewalk level with ramps on all approaching streets	Possible	Possible	Yes	Yes	Maybe		Ensure that ramps are gentle enough to accommodate large emergency access vehicles	No
Neighborhood Traffic Safety Campaign	Distribute information to neighborhood and/or City residents	No	Not Likely	Yes	Yes	Maybe			No
Traffic Signals	Standard signal design used throughout SLO	Seldom	Yes	No	Yes	Yes	Consider installation only at intersections where conditions meet warrants set forth in the <i>Caltrans Design Manual</i>		
Video Enforcement At Signalized Intersections	Cameras record motorists who fail to stop & citations issued	No	Possible, close to intersection		Yes	Yes			No

(1) The source of these qualitative ratings is taken from *A Guidebook for Residential Traffic Management*, Final Report, December 1994, Washington State Department of Transportation

(2) **RL** = Residential Local **RC** = Residential Collector **RA** = Residential Arterial

(3) **Primary Emergency Access Routes** are those listed in Appendix to this document.

Device/Activity	Description	Reduce Volume (1)	Reduce Speed (1)	Apply to Street Type (2)			Other Application Limits	Design Principles	Candidate Temp. Activity/Facility
				RL	RC	RA			
Other Complementary Tools									
Landscaping	Landscaping that emphasizes the area's residential character and visually narrows the roadway	No	No	Yes	Yes	Yes	Use to complement other NTM devices/activities to reduce speed		No
Neighborhood Entry Signs	Example: Signs that alert motorists that they are entering a residential area to drive carefully	No	No	Yes	Yes	Yes			No
Speed Limit Signs	"25 mph in residential area" etc.	No	No	Yes	Yes	Yes	Use in combination with other NTM devices or activities that reduce speed		No
Novelty Signs	"Slow, Quiet Neighborhood Ahead" etc.	No	No	Yes	Maybe	No			No
Special Pavement Markings – Striping and Color	Special markings at entries or crosswalks to alert drivers to special conditions	No	Possibly	Yes	Yes	No			No
Rubberized Asphalt Overlays	Install rubberized paving material to reduce traffic noise	No	No	No	Maybe	Yes			
Neotraditional Neighborhood Design	Integrated land use and transportation design to increase transit and non-motorized travel	Likely	Likely	Yes	Yes	Maybe	Generally apply concepts to newly developing neighborhoods and to older areas with grid-pattern streets		No

(1) The source of these qualitative ratings is taken from *A Guidebook for Residential Traffic Management*, Final Report, December 1994, Washington State Department of Transportation

(2) **RL** = Residential Local **RC** = Residential Collector **RA** = Residential Arterial

(3) **Primary Emergency Access Routes** are those listed in the Appendix to this document

SAMPLE SUGGESTED ROUTE TO SCHOOL MAP
(Not officially adopted)

THE UNIVERSITY OF CHICAGO
LIBRARY



LEGEND

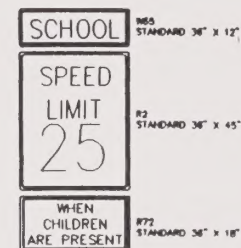
- CROSSWALK
- SCHOOL CROSSWALK
- SIGNAL
- PAVED SIDEWALKS
- STOP SIGN
- PAVEMENT MARKING "SCHOOL XING"
- SIGN
- SCHOOL BUS STOP
- FLASHING SIGNAL

SIGN LEGEND

- A INSTALLATION A
- B INSTALLATION B
- C INSTALLATION C



INSTALLATION A



INSTALLATION B



INSTALLATION C

Sample Suggested Route to School Map



NOT RECOMMENDED FOR
SPECIAL COLLECTIONS
(See original report)

INTRODUCTION

Children, Traffic, and Safety

Did you know that traffic collisions are the leading cause of death for children under the age of 15? Nationally, one third of all fatal accidents between pedestrians, bicyclists, and automobiles involve children in this age group. The majority of these accidents involve children between the ages of 5 and 9 years, the age at which children are just beginning school. An estimated 30,000 children are killed or injured each year across the United States. Many of the injuries result in permanent and severe disabilities. These accidents occur because children lack the knowledge and experience to safely negotiate streets. This is why parents and teachers need to emphasize traffic safety education early.

What is the purpose of this traffic safety booklet?

For parents....

Ultimately, the safety of your child when walking or riding a bicycle to school is your responsibility. You need to be assured that your child knows the basic safety "rules" for walking and bicycling, how to use traffic control devices such as signal controlled crosswalks, and is attentive and aware of the potential traffic dangers. This booklet contains important information you need to know to teach your child how to safely reach school and home again. This booklet describes the most common types of accidents and how to prevent them, presents the basic rules of the road for pedestrians and bicyclists, and describes how to use the "Suggested Route to School" map available from your child's school. You are encouraged to become familiar with the material in this booklet and instruct your child using the guidelines presented. You are also encouraged to walk or bike with your child along your selected route to school until you feel comfortable with their abilities and understanding.

Finally, set a good example for your child--they will model their actions after yours.

For teachers....

Teachers play an important role in educating students in traffic safety. This booklet presents some of the fundamental information, guidelines, and a list of resources for you to develop a traffic safety curriculum. You are encouraged to develop an in-class program focusing on pedestrian and bicycle safety and have your class participate in activities such as bicycle rodeos. There are excellent programs available through public and private organizations such as hospitals and insurance companies. Also, ensure your students are familiar with the "Suggested Route to School" maps and encourage their parents to utilize this booklet in conjunction with the maps.

Organization of this booklet

This booklet is organized into four sections. The first two sections address pedestrian and bicycle safety. These sections discuss the causes of the most common types of accidents, present ways to prevent the accidents with fundamental safety rules, and suggest activities that parents and teachers can do with children to ensure the safety rules become lifelong habits. The third section discusses how to use the "Suggested Route to School" map available from the school. This section provides guidelines and activities for parents to develop their own preferred route with their children. The fourth section presents general guidelines for teachers to develop in-class traffic safety curriculum and programs. This section also lists organizations that can provide resources and information on traffic safety and educational programs.

SECTION 1 - PEDESTRIAN SAFETY

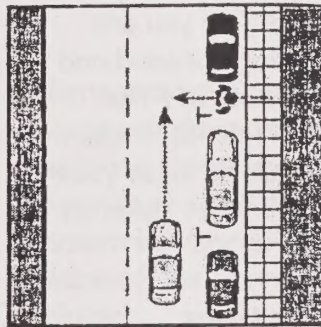
When it comes to traffic safety, children are not small adults. They have limited peripheral vision, are smaller and shorter, lack a sense of immediate danger, and cannot appropriately assess gaps in traffic. For these reasons, young pedestrians are at a greater risk for traffic accidents than adults and even older children.

Most common types of child-related pedestrian accidents

1. Midblock dartout

Children do not have a defined sense of danger and have difficulty judging the speed of oncoming cars. Many children are injured or killed every year when they suddenly dart out into the path of a car, often to race across the street or to retrieve a ball. Commonly, the child will dart out into the street from between two

parked cars, leaving little or no time for an oncoming vehicle to stop.



How to prevent it

To prevent this type of accident, instruct your child on the basics of crossing streets:

- Always stop at the curb or edge of the road.
- Look LEFT, RIGHT, then LEFT again.
- Only when the road is clear, begin crossing.
- As you cross, continue to look LEFT-RIGHT-LEFT until you have safely reached the other side.

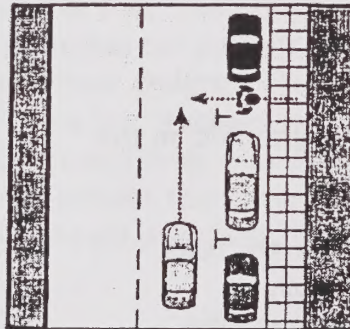
- Do not enter the street to retrieve a ball until the street is clear, even at the risk of the ball being run over by a vehicle.
- Never enter a street from between parked cars, or tall bushes or shrubs.
- Crossing a street should always be performed at an intersection and preferably within a crosswalk.

Activities to do with your child

Although your child may not know the directions left or right until age five or six, they are capable of mimicking your actions and repeating your words. Select a quiet section of street in your neighborhood. When you get to the street crossing, have your child stand about ten feet behind you. While you stand at the curb, describe how you are looking to the left, looking to the right, and looking to the left again. Have your child repeat your movements and words. Let your child know that you are looking for approaching cars. Have your child step forward and repeat the same motions and words. After you step off the curb, emphasize that you continue to look left-right-left again until you are safely across the road. If you regularly meet your child at the school bus stop after school, always meet them on the same side of the road as the bus stop.

2. Parked cars and other obstructions

Many children are involved in accidents when they suddenly enter the roadway from between parked cars or bushes and shrubs. Children are shorter and cannot see over objects nor can they be seen by motorists.



How to prevent it

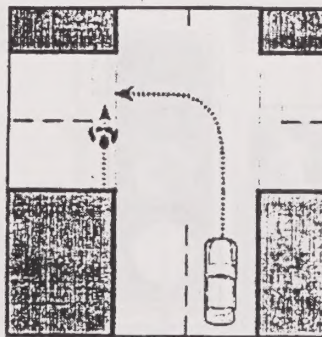
Children should be taught not to walk between parked cars. Instead, instruct them to walk on the sidewalk or shoulder of the road to the nearest intersection. Teach your child to cross at corners, especially those protected by a traffic signal, or adult crossing guard. If they must cross midblock and cannot see the road clearly because of an object (parked car, bush, mailbox) instruct them to walk to the edge of the object and look left-right-left before entering the road.

To decrease traffic congestion around your school and to improve the safety of other children walking to school, designate a pick-up and drop-off spot away from the school's main loading area. Better yet, resist the urge to drive and walk your child to and from school until your child is capable of walking safely on their own.

3. Turning vehicles

Drivers in a hurry are impatient. They may try to complete a turning movement on a green signal into the path of a crossing pedestrian. Right-turns-on-red are allowed at most signalized intersections to facilitate the flow of traffic, but present especially hazardous crossing conditions for small children because drivers are looking to their left and often begin their turn before looking right where a pedestrian may be crossing. Left-turning vehicles can also present a potential danger

where the left-turn movement does not have a separate signal phase. As shown in the graphic, a pedestrian may not be aware of the approaching vehicle.



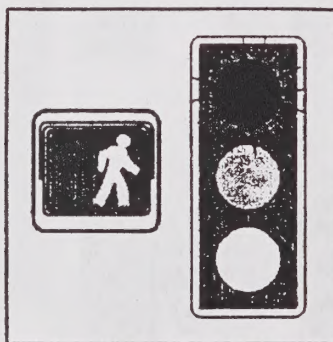
How to prevent it

Teach your child that a green light means you have permission to stop and search for cars, not that you have permission to cross. Instruct them to look left-right-left, and only when safe, begin crossing. Keep on looking as you cross, and be alert for vehicles making a right turn on red or for vehicles turning left across a crosswalk. Teach your child to make eye contact with drivers to ensure they are seen. Teach your child to wait until a driver sees them when the driver is waiting to turn right.

Activities to do with your child

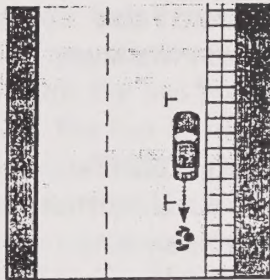
Pedestrian accidents occur at signalized intersections because people do not obey the traffic lights correctly. At intersections with signal control, point out the WALK and DON'T WALK displays. If they are too young to read, associate the displays with the colors (white = WALK, red = DON'T WALK). Explain to your child that the WALK display and the green traffic light means to begin searching for cars, not that it is safe to cross. When the signal turns green and the WALK signal comes on, look LEFT-RIGHT-LEFT, and only when safe, begin crossing. A flashing DON'T WALK means don't start to

cross the street. However, if you are in the middle of the street and the DON'T WALK signal starts flashing, continue walking to the other side or to a pedestrian refuge on the center median. Traffic signals are timed for you to complete the crossing. If you see a steady DON'T WALK signal, do not cross. Wait for the WALK signal.



4. Vehicles backing up

Children are commonly struck by vehicles backing out of driveways, parking spaces, or busy commercial streets. Drivers often cannot see children because of their smaller size and height.



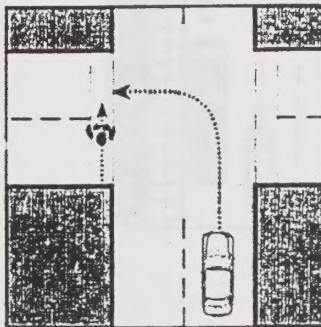
How to prevent it

Teach your child about the signs that a car is about to move. Have them stand to the back and side of your vehicle after you have turned on the ignition. Point out the rear brake light, exhaust smoke, and sound of a running motor. Have another adult put the car in reverse and point out the back-up lights. When in commercial areas with your child and you see a delivery truck backing up, point out the audio sound most trucks make when reversing. Instruct your child to stop and wait for a vehicle to move out before proceeding across the street, driveway, or parking space. Teach your child to carefully pass driveways that they cannot see because of obstructions such as a high hedge.

5. Crosswalks

Crosswalks are merely painted lines on the road, and many children are killed or injured crossing a street within a crosswalk.

Crosswalks indicate where pedestrians should cross and warn drivers to slow and watch for pedestrians, but do not protect pedestrians or guarantee pedestrian right-of-way.



Crosswalks do not offer protection from reckless drivers running red lights. Crosswalks may give pedestrians a false sense of security, that they are safe when between the lines.

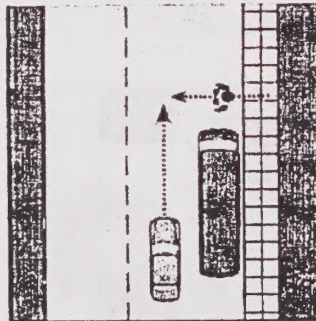
How to prevent it

Teach your child to stop at the curb and look LEFT-RIGHT-LEFT before entering the crosswalk. Explain to your child that even if you can see the driver, the driver may not see you. Teach them to make eye contact with the driver and be certain that the driver sees you and stops before crossing in front of a car. At signalized intersections, teach your child to push the button and wait for the WALK indication even if the wait is long and there are no approaching vehicles.

During unsignalized, midblock crossings, if a car stops to let you cross, wait until all cars have stopped before entering the street. Walk to the far side of the stopped car and look LEFT-RIGHT-LEFT. When all is clear, cross the street looking LEFT-RIGHT-LEFT until you are safely on the other side. On multi-lane roads, drivers will often pass a vehicle stopped for a pedestrian and strike the pedestrian because the driver's view was obstructed by the parked vehicle.

6. School or public transit bus stops

Bus stops pose a danger to children in which the child is hidden from bus and approaching vehicle driver's view by other vehicles or objects. This potential conflict can happen at intersections or at midblock locations.



How to prevent it

Teach your child the following rules for waiting, boarding, and exiting any bus.

- Students should stand at least six feet from the road when waiting at the bus stop. If you must cross the street to board the bus, wait until the bus has come to a complete stop or cross before the bus comes.
- When entering or approaching a bus make eye contact with the bus driver and be certain that the driver has seen you. Wait for the driver to signal for you to cross. Go to the curb and look LEFT-RIGHT-LEFT. When safe, cross, continuing to look for cars. Cross at least 10 feet in front of the bus where the driver can see you. When you get to the other side, walk at least six feet beyond the edge of the bus. If you drop something in front of the bus, do not stop to pick it up. Tell the driver when you get on the bus and ask for help.
- NEVER cross behind a bus where the driver cannot see you.

Common Myths about Pedestrian Safety:

- ✓ **A green light means it is safe to cross the street.**
No! A green light means you only have permission to cross. Look LEFT-RIGHT-LEFT, and then cross only when it is safe to do so.
- ✓ **You are safe in a crosswalk.** No! You may cross at a crosswalk--but you must stop at a curb, look LEFT-RIGHT-LEFT and cross only when safe.
- ✓ **If you see the driver, the driver sees you.** No! The driver may not see you. Always try to make eye contact with the driver before entering the crosswalk.
- ✓ **The driver will stop if you are in a crosswalk--or if you have a green light.** No! The driver may not see you, or his view may be obstructed, or he may run a red light. The driver may turn without looking for pedestrians.
- ✓ **Wearing white at night makes you visible to drivers.**
No! Even if you wear white clothes, drivers will have a hard time seeing you at night. Wear reflective clothing, carry a flashlight, and always walk facing traffic.

More Pedestrian Safety Tips:

- ✓ **Walk Facing Traffic.** In areas with no sidewalks, children should be instructed to walk facing traffic and keep as far to the left side of the roadway as possible.
- ✓ **Poor Weather.** Children should be extra alert in bad weather. Drivers have trouble seeing and stopping in bad weather and are more likely to lose control of their vehicle. Dress children in high visibility clothing.

SECTION II - BICYCLE SAFETY

Consider a bicycle your child's first vehicle, not a toy. When riding on the street, bicycles are subject to the same laws as motor vehicles.

Most common types of child-related bicycle accidents

1. Head injuries

Head injuries account for more than 60 percent of bicycle-related deaths and about one-third of hospital emergency room bicycle-related injuries. Many of these injuries are severe and result in permanent disabilities. Even with approved helmets, improper fit and use of the helmet can still result in severe injury.



How to prevent it

Under California law, all bicyclists under age 18 must wear a helmet that meets American National Standards Institute (ANSI) or Snell standards. Studies have shown that wearing a bicycle helmet can reduce head injuries by up to 85 percent. Parents should insist that all bicycle riding requires the proper wearing of a helmet.

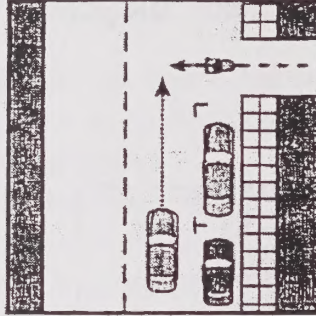
Activities to do with your child

Buy your child an approved bike helmet that has a label inside certifying the helmet meets Snell or ANSI standards. Let your child pick out the helmet. Make sure the helmet fits your child's head properly (see graphic). If you are unsure about the fit, purchase the helmet from a store with knowledgeable

salespeople who can properly fit the helmet and show you how it should fit and be adjusted. Parents should also buy and wear helmets to set a good example.

2. Midblock rideout

This is the most frequent accident type for young riders. A bicyclist darts out into the road from a driveway, alley, or curb without slowing, stopping, or looking for traffic. A driver is unable to stop in time.



How to prevent it

Teach your child about the rules of the road. Teach your child to always stop at all stop signs and red lights, and whenever approaching a street from a driveway or uncontrolled side street. As with walking, teach your child to look LEFTRIGHT-LEFT for traffic before entering or crossing the street.

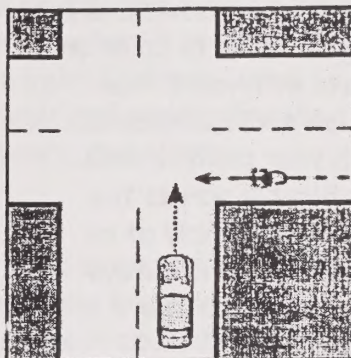
Activities to do with your child

Draw two cartoon "cars" on two pieces of cardboard. With the help of another adult, stand out in the road near your driveway, one person on each side. Instruct your child to ride out to the end of the driveway and stop. Explain that if you are holding the "car" up, it signals oncoming traffic. If you hold the "car" at your side, it means the road is clear. Your child gets a point each time he or she waits when a car is approaching, and when he or she goes when no "car" is approaching. At first, teach your child to look LEFTRIGHT-LEFT for traffic and ONLY go when the road is clear. Gradually make the game tougher, flashing the "car" from both directions, indicating heavy traffic.

3. Riding against traffic

Bicyclists, especially young riders, often ride on the left facing traffic so they can "see" the cars. Not only is it unlawful to ride the wrong way, it can result in serious injury and death. Drivers do not expect traffic to be approaching from the wrong way. This situation is particularly dangerous at intersections where drivers are looking left for gaps in traffic before turning right. Drivers do not expect a bicyclist to be approaching

from their right and frequently turn into the path of the bicyclist without noticing them until it is too late.



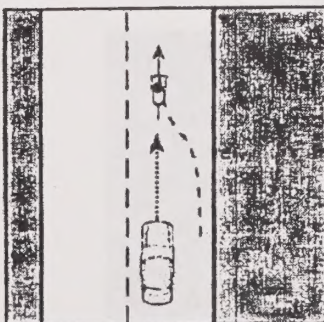
How to prevent it

Teach your child to always ride with traffic, never against it. Also instruct your child to be aware if they are riding on a sidewalk and try to cross at an intersection.

4. Bicyclist turning left or swerving suddenly

This type of accident occurs when a bicyclist swerves into traffic or performs a sudden turning movement across travel lanes without checking for approaching traffic or signaling. This frequently occurs with children who have not mastered control of their bicycles or who

race across travel lanes to avoid having to stop.

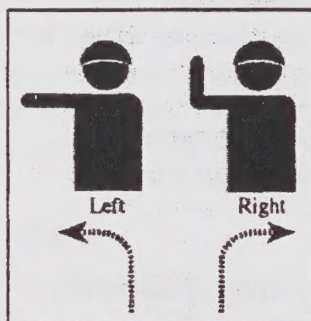


Children do not feel comfortable turning left from within the same lanes that vehicles use, as required of adult riders.

How to prevent it

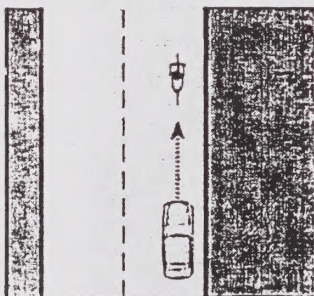
Teach your child to be predictable. Always ride in a straight line. When changing lanes, look behind you and wait until traffic is clear. Give the left-hand signal when making a left turn and when it is safe, move to the left lane. Give the right-hand signal when making a right turn and make your turn when traffic is clear. Before permitting your child to ride on the street, be confident they can control their bike and ride steadily. If your child has difficulty looking behind them without swerving, consider purchasing a handlebar mounted rearview mirror.

While adult riders are required to turn left from travel lanes or left turn lanes, it is not advisable for young children to do so on streets with more than very low traffic volumes. Teach your child to walk their bicycle across the street, preferably at an intersection, and always when crossing within a crosswalk.



5. Motorist overtaking bicyclist

Motorists often fail to see bicyclists until it's too late. This type of accident occurs at night, typically on narrow rural roads with high speeds.



While children rarely ride their bicycles on this type of road at night, they should be prepared in the event the situation ever occurs.

How to prevent it

Children under age nine should not ride in the road or in the dark. Older children should avoid riding in the dark, particularly on narrow roads or where speeds are over 35 mph. If it is necessary for your child to be out when it is dark, equip your child's bicycle with a white light in front, a red light in the rear and reflectors on wheels and pedals. Ensure they wear reflective clothing, wrist bands, and shoes.

6. Bicyclist fails to stop

Since drivers are required to stop at stop signs and red lights, they expect others to do the same including bicyclists. About one out of every ten car/bicycle accidents is caused by a bicyclist failing to stop.

How to prevent it

Explain to your child that their bicycle is a vehicle, not a toy. Explain that all vehicles must obey traffic laws including stopping at stop signs and traffic signals.

Bicycling Safety Tips:

- ✓ **Wear** an approved helmet each time you ride.
- ✓ **Know** and follow the rules of the road. Obey all traffic signs and signals.
- ✓ **Always** ride on the right side of the street with traffic, never against it.
- ✓ **Avoid** bicycling in the dark. If you must, use a front light, rear tall light, reflectors, and reflective clothes. Even during daylight, wear high visibility clothing. Dayglo colors are highly visible.
- ✓ **Before** entering or crossing the street, look LEFT-RIGHT-LEFT, and go only if no cars are coming.
- ✓ **Keep** your bicycle in good repair.
- ✓ **Never** ride "double" on a bicycle.
- ✓ **Always** walk your bicycle when crossing a street within a crosswalk.

SECTION 3 - SELECTING A ROUTE TO SCHOOL

How to use the suggested route to school map

The following guidelines will assist you in developing a suggested route to school or to a bus stop, whether your child rides a bicycle or walks. The suggested route to school map identifies the location of your school, all of the streets in your school's attendance area, the location of school bus stops, and intersections which have adult crossing guards. The map also shows where there are sidewalks or paved paths, bicycle lanes and routes, and whether an intersection is controlled by a stop sign, a traffic signal, or no control at all. This is the basic information you need to begin planning the best route for your child to get to and from school.

- Involve your child in selecting a preferred route to and from school or the school bus stop. Use a color pencil or crayon, to mark the route(s). Post the map in a conspicuous location, such as in the child's room or on your refrigerator.
- Walk or bike the route you and your child have selected. Do this with your child frequently until they have memorized the route and you feel comfortable with their ability to follow the route.
- As you walk or bike, explain the meaning of traffic signals, stop signs, and other traffic control devices along the route. Help your child understand why it is safer to use crosswalks and sidewalks, where available. Help them locate these features on the suggested route to school map.
- Help your child locate all safe crossings, the safest side of the street to walk on, and adult crossing guard locations. Plan your route to maximize the use of adult crossing guards, traffic signal or stop controlled crosswalks, sidewalks, and bicycle lanes. Teach your child

to listen to and obey the instructions of adult crossing guards.

- Be alert to hazardous conditions particular to your area, such as construction work zones, potholes, buckled sidewalks and damaged pavement, drain grates, limited line of sight and other obstructions along the route. Instruct your child on how to safely maneuver around the dangers. If this is not possible, select an alternate route.
- Mark the map with any potentially hazardous situations and report it to your school principal or traffic safety representative.
- Observe the traffic volumes and speeds on the route you have selected. If volumes and speeds are high, select another route even if it is longer and less direct. If unavoidable, explain the dangers of higher traffic volumes and speeds and reinforce the basic safety rules.
- Many streets have a paved shoulder separated from the travel lane with a white stripe. This shoulder is a good area to ride a bicycle, or walk if there is no sidewalk. However, unless the map identifies it as a "bike lane" it is not a bike lane and may be discontinuous, have a varying width, or disappear altogether. Carefully observe these conditions along the entire route and avoid routes that may force your child into the travel lane.
- If your child must walk or bicycle in the dark, select a route that has street lights if possible. This may be a different route than your selected daytime route. Note route segments that have gaps in street lighting and teach your child to stay well off the roadway and to assume that drivers cannot see them. Always ensure your child has reflective clothing, and lights and reflectors on bicycles.
- Teach your child to stop, listen, and look for approaching and turning vehicles, especially those turning right on red. Ingrain the rule of looking LEFT- RIGHT-LEFT again whenever crossing a street.

SECTION 4 - GUIDELINES FOR TEACHERS AND SCHOOL ADMINISTRATORS

Teachers and school administrators can participate in safe routes to school. You play an important role in bringing students, parents, and the school together for this essential activity. There are many things teachers can do to augment the parent's traffic safety education. These things can be built into your curriculum or cooperatively among all grades.

Involve the parents

Traffic safety should be a cooperative home/school effort. Remind parents of the suggested route to school maps and this handbook. Consider class projects to develop route maps, learn traffic rules, and develop good walking and riding habits. display class projects or route maps during back to school nights where parents can see and discuss them. Teachers and administrators should work with the school district and police department to establish an annual bikeE rodeo event to teach children safe bicycling. Share your teaching plans with parents, and provide them with maps and handout material available from many sources (see resources). Ask your students to bring copies of completed maps, whether they walk, bike, or are driven to school.

Get PTA and Traffic Safety Committee assistance

Use these entities to get parents involved and distribute information. Set-up booths or displays at back to school nights and registration times to distribute maps and handbooks. Prepare a follow-up letter to parents to reinforce the safety campaign or to announce special projects.

Plan a traffic safety program the week before school

Consider a special traffic safety program for parents during the first few weeks of school each year. Use the program to discuss your transportation rules such as use of bus loading

zones, visitor parking, pick-up and drop-off procedures, and use of the suggested route to school maps.

Resources and acknowledgments

The authors of this handbook would like to acknowledge the following sources of information. The organizations listed below can provide brochures, booklets, educational material, videos, and coloring books to help teach parents and students safe walking and bicycling practice.

1. California State Automobile Association (AAA)
Traffic Safety Department
150 Van Ness Avenue
San Francisco, CA 94142
Ph: (415) 565-2305
Fax: (415) 437-2398
www.ottoclub.org
2. U.S. Department of Transportation
Nation Highway Traffic Safety Administration
Traffic Safety Programs
400 7th Street, SW
Washington, D.C. 20590
www.nhtsa.dot.gov/people/outreach/KidsPage/biketour
3. California State Office of Traffic Safety
Bicycle and Pedestrian Coordinator
7000 Franklin Blvd. #440
Sacramento, CA
www.ots.org
4. National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
Ph: (630) 285-1121
Fax: (630) 285-1315
www.nsc.org

- Stress rules such as walking, not running across the street, no horseplay while near traffic, no headphones while bicycling.
- Observe and encourage your children for following the safety guidelines.
- If your child cannot deal with the traffic environment, plan to take and pick them up by some other method than walking or riding a bike.
- Most importantly, set a good example for your children by following the same safety rules. Practice cautious driving habit~ in school zones.

Special guidelines for selecting a route for travel when it is dark

Children are sometimes required to travel to school or a bus stop when it is dark, particularly in the winter months. Route selection becomes more critical when the route will be used before dawn or after dusk. Therefore, parents must take care in selecting a primary route to be used all year or the selection of alternative routes to be used in the dark. Use the following guidelines for selecting these routes:

- If possible, select a route that has adequate street and intersection lighting. Adequate lighting illuminates the sidewalk or bike lane and intersection corners. Walk the route with your child in the evening and early morning, pointing out potential hazards. Avoid routes with long gaps in illuminated sections.
- Instruct children to stay on sidewalks or as far to the right of the street shoulder as possible.
- It is essential that children wear clothing, armbands, or other apparel with reflectors both front and back. Even better, use battery operated flashing devices which attach to the child. If bicycling, reflectors must be in good condition on all sides of the bike.
- Instruct children not to "play around" while walking or waiting at the bus stop.

- Mark the illuminated routes on your map, indicate gaps in illumination, and indicate the best lit locations for children to cross. Routes for travel in the dark may be longer than daylight routes.
- Reinforce the need to use special routes, reflective clothing, and safety rules for traveling in the dark. Consistently enforce the rules you have adopted.

Route Selection Guidelines:

- ✓ Select the most direct, safe route. If there is a shorter route that is less safe, explain to your child why it is better to use the longer route. Emphasize that your child must use the same route each day.
- ✓ Select routes that minimize the number of streets your child must cross.
- ✓ Select routes with special crossings (pedestrian overpasses) or protected crossings (adult crossing guard). Maximize the use of traffic signal controlled intersections.
- ✓ Select streets with slow vehicle speeds and low traffic volumes.
- ✓ Select routes with uncomplicated intersections.
- ✓ Select routes with continuous sidewalks.
- ✓ Select routes which maximize streets with school speed zones and yellow school crosswalks.
- ✓ Select routes with designated bike lanes or paths.
- X Avoid streets where your child must cross at sharp grades or curves.
- X Avoid streets where your child must cross midblock.
- X Avoid routes with blind curves or intersections.
- X Avoid routes with congested streets.
- X Avoid routes with high speeds (more than 35mph).
- X Avoid routes which contain intersections where vehicles park near crosswalks and obstruct the view of pedestrians.
- X Avoid busy streets with numerous driveways.

5. Institute of Transportation Engineers
525 School Street, S.W.
Washington, D.C. 20024
Ph: (202) 554-8050
Fax: (202) 863-5486
www.ite.org



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